

PUBLIC HEALTH ACT,

(11 & 12 Vict., Cap. 63.)

14,378

R E P O R T

TO THE

GENERAL BOARD OF HEALTH

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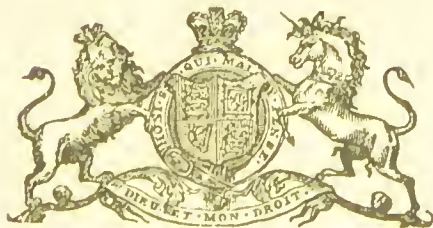
PRELIMINARY INQUIRY

**INTO THE SEWERAGE, DRAINAGE, AND SUPPLY OF
WATER, AND THE SANITARY CONDITION
OF THE INHABITANTS**

OF THE CITY AND COUNTY OF

B R I S T O L.

BY **GEO. T. CLARK,**
SUPERINTENDING INSPECTOR.



LONDON:

PRINTED BY W. CLOWES & SONS, STAMFORD STREET,
FOR HER MAJESTY'S STATIONERY OFFICE.

1850.

NOTIFICATION.

THE General Board of Health hereby give notice, in terms of section 9th of the Public Health Act, that on or before the 24th of July next, written statements may be forwarded to the Board with respect to any matter contained in or omitted from the accompanying Report on the Sewerage, Drainage, and Supply of Water, and the Sanitary Condition of the Inhabitants of the City of BRISTOL, or with respect to any amendment to be proposed therein.

By order of the Board,

HENRY AUSTIN, *Secretary.*

Gwydyr House, Whitehall,

21st June 1850.

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PUBLIC HEALTH ACT (11 and 12 Vict., cap. 63).

Report to the General Board of Health, on a Preliminary Inquiry into the Sewerage, Drainage, and Supply of Water, and the Sanitary Condition of the Inhabitants of the City and County of BRISTOL. By GEO. T. CLARK, Superintending Inspector.

MY LORDS AND GENTLEMEN,

Bristol, 3rd April 1850.

I HAVE the honour to inform you that I have inspected and made inquiry into the sanitary condition of the City and County of Bristol. Notice of my visit was advertised, in the form directed by the Public Health Act, in the "Bristol Journal," "Mirror," "Mercury," and "Times" newspapers, each of the 26th of January, and 96 forms of notice were affixed to the church and chapel doors, and upon other places where public notices are usually exhibited in Bristol.

I commenced the inquiry in the grand-jury room of the Guildhall, on the forenoon of the 13th of February, and held public sittings there, each forenoon, on the 14th, 15th, 16th, 18th, 19th, 20th, 22nd, 25th, and 26th of the same month, and on the 2nd of March. The remainder of those days, and the 21st, 23rd, and 27th of February, were employed in the inspection of the city, and in collecting materials for the following

REPORT.

1. This inquiry took place in consequence of a resolution of the Town Council of Bristol, communicated to your Board by the Mayor, and was rendered legal by the return of the Registrar-General, showing a mortality above the standard laid down in the Public Health Act.

2. The inquiry was actively supported by the Mayor and Corporate authorities, the Bishop and Parochial clergy, the Paving Commissioners, and the public at large. I have especially to acknowledge the very cordial co-operation of the town clerk, Mr. Daniel Burges the younger, who issued circulars, and collected and classified information, and of Dr. Kay, alderman, author of a late report upon the sanitary state of Clifton, a member of the Public Health Committee of the Town Council, and secretary to the Bristol Association for Improving the Public Health. These gentlemen accompanied me throughout the whole of the inquiry and inspection, and gave me the full advantage, one of his peculiar official position, and both of their accurate local knowledge.

3. The information provided on almost every subject embraced in the inquiry was very ample, and included a return prepared for the occasion by the city police, under Lieut. H. Fisher, R.N., of the condition of every court and street in the city, with certain particulars concerning the houses. From the Rev. Canon Barrow, Rural Dean of Bristol, and from Mr. C. Savery, Registrar to the New Cemetery, I received much information on the subject of burials and burial grounds. The Paving Commissioners passed a unanimous resolution, "that the several officers of this Board be directed to attend the Superintending Inspector, and afford him every information upon the several works under their respective jurisdictions, and that they be authorized to produce to such Inspector any books, plans, or documents he may require;" a resolution, the letter and spirit of which were fully acted upon by Mr. J. Harris, clerk to the Commissioners, Mr. Armstrong, their surveyor, and Mr. S. S. Birtill, their inspector of lighting and scavenging.

4. Mr. F. Ward, on the part of the Corporation of the Poor, Mr. W. O. Hare, clerk to the District Commissioners, Mr. Lucas, chairman of the Highway Board for Bedminster, Mr. Slade, filling the same office for St. Philip and Jacob (without), Mr. Chick, collector of the same parish, Mr. Easterling, surveyor of Westbury, and Mr. Mintorn, highway surveyor of Clifton, afforded me all the information I required at their hands.

5. The two Gas Companies forwarded to me particulars of their establishments; and the chairman and officers of the Water Company, and their engineer, Mr. Simpson, accompanied me over their works, and gave a statement of such particulars as I required. Mr. S. Goldney, officer of health during the presence of the cholera in Bristol, furnished me with a map showing the spots visited by that disease, and pointed them out to me on the ground during the inspection.

6. Many maps and plans were produced by various persons; but there is no good general plan of the whole of the city and county, no plan of the "town proper" of recent date, and no general plan at all, showing the course of the sewers, water-pipes, and gas-pipes. The Commissioners' plan of the old city is not of late date; the course of their own sewers is, however, laid down upon it. There is no regular series of surface levels referred to a common datum line, and there is no complete record of the dimensions, figure, material, inclination, or state of repair of the public sewers. The map appended to this Report is, for the above reasons, very imperfect.

7. The subject of sanitary reform is by no means new to the citizens of Bristol. In 1843-4, Sir H. de la Beche and Dr. L. Playfair reported upon the sanitary condition of Bristol to the Health of Towns' Commissioners, as did Dr. Kay upon Clifton, and upon the "mortuary statistics" of Bristol. In 1848-9, the

“Bristol Association for the Improvement of the Public Health,” supported by the Bishop, published a series of reports upon house-to-house examinations of the different districts in the city, and thus directed public attention to those localities in which, judging from the experience of 1832, the cholera might be expected to break out. Moved by this society, the Corporation appointed a Public Health Committee of the Town Council, the result of which, by the unanimous resolution already referred to, was the application, to the General Board of Health, for the present inquiry.

8. As this Report, although directly addressed to your Board, will, in compliance with the Public Health Act, be made public in Bristol with a view to its being commented upon by the citizens; and is intended, should the Public Health Act be applied to the City, in some measure for the guidance of the future Local Board; and as it is very important that those who are most concerned in this matter should possess means, as full as possible, of judging of the efficiency of the measures which I shall have to recommend; I have felt it necessary to touch upon and explain many points, and to make many observations, which would be out of place in a Report intended only, and finally, for the consideration of the General Board.

9. GENERAL DESCRIPTION.—Bristol, from Saxon times and for many centuries second only to London in population, commerce, and wealth, is still the metropolitan city and port of Western England, and gives name to the principal estuary in Great Britain.

10. Bristol, a corruption it is said of “Bright-stowe,” the “bright” or sunny “place,” is built upon a slope facing towards the south, sheltered by still higher ground from the northern winds, and at the foot of which flows the river Avon in its passage from Chippenham and Bath to the Bristol Channel. The slope, a part of the long ridge of mountain limestone which bounds on the west the Bristol coal field, here presents a considerable prominence towards the river, which, in forming a double curve, passes through the present, and partially included the ancient, city.

11. Geologists have inferred, from certain marshy tracts and raised beaches, that the original course of the Avon from near Bristol lay along the foot of the limestone range, and joined the sea at Clevedon. However this may be, its waters now flow through a singular chasm which cleaves the range, and the entrance to which is but a short distance below the city, at a point where the rocks rise on either side to precipitous heights of 250 to 300 feet, and are only 600 feet apart. Those on the right bank, known as St. Vincent rocks, have given the name of Clifton to the principal suburb of Bristol.

12. It is to the splendour of the scenery connected with this chasm, to the medicinal hot springs which issue from its depths,

and to the salubrious air and extensive greensward of the elevated table land above it, that Clifton owes its celebrity as a place of health and recreation; and it is probable that to the direct and convenient communication thus opened with the Western Sea, Bristol is indebted for its early and long continued commercial prosperity, and more particularly for its connection with the West Indian trade, once so lucrative.

13. As the sanitary condition of Bristol is materially affected by the disposition and nature of its ground, and the direction of its water-courses, it will be necessary, to render intelligible the account of its existing evils, and the remedies which it will be necessary to propose for them, to describe, at some length, the natural features of the place.

14. In the midst of the present city, the Avon is joined on its right or northern bank by the Frome, a much smaller stream, which rises as the Laden near Wickwar, and receives the drainage of that considerable valley which lies between Chipping-Sodbury and Almondsbury ridge, and forms the northern half of the Bristol coal-field.

15. The Frome, before its junction, runs for a short distance parallel to the Avon, and the two rivers thus form a peninsula, the neck of which is high, rocky, and narrow, but the extremity very low and marshy, and probably deposited by the action of the two rivers.

16. The advantages of this position were not overlooked by men whose pursuits stood in peculiar need of security. The ancient city was built upon the middle part of the peninsula, cut off from the marsh by a transverse ditch, and upon the isthmus, the Normans erected a castle, which they strengthened by a second and deeper cut from the Frome to the Avon, still known as "the Castle ditch." By degrees, the city extended across the Avon, on the flat, into the parishes of St. Thomas Temple, and St. Mary Redcliffe. Although many churches and religious houses were erected on the northern bank, it was very long before the city extended its limits over the high ground, which, though obviously more healthy than the flat, was less convenient for traffic, and less strongly fortified by nature.

17. The ground above the Avon, though generally rising, presents many inequalities of hill and valley. The principal of the higher eminences are Brandon Hill, St. Michael's, Kingsdown, and Montpellier, ranging from 200 to 250 feet above the river. Lower down, upon their flanks, are the platforms marked by the churches of St. Barnabas and St. James, the College Green, St. Augustin's, and the Cathedral. South of all these, between the Frome and the Avon, is a lower line of high ground, the ridge of which is marked by Clare, Corn, Narrow Wine, Old-market, and West Streets, and which thus forms the left bank of the former, and the right bank of the latter river. These detached hills, the main and cross vallies, and the ridge, add much variety to the appear-

ance of the city, and materially facilitate its drainage and ventilation. The hills are, however, finally lost in a crest which extends from Brandon Hill, by Tyndall's Park, to Kingsdown, and which at present nearly marks the northern edge of Bristol, and was, in fact, the line of defence fortified during the Royal and Parliamentary struggles in the 17th century. The whole drainage, south of this ridge, flows direct into the Frome and Avon.

18. Northwards of this ridge, and of Clifton, a broad and fertile valley extends to the distant and more elevated ridge of Durdham Down and Redland. West of the Zoological Gardens, this valley, and the houses upon its slopes, drain direct into the Avon. East of the Gardens, the valley is occupied by a scarcely perceptible tributary of the Frome, which, receiving other streams from Redland and Horfield, sweeps round Kingsdown, and thus circumscribes the greater part of Bristol, and provides an excellent natural drainage for its north-eastern frontier, as well as for Montpellier, and other suburban extensions of the city eastwards. Besides this, several smaller valleys descend from various parts of the city towards the Frome, and thus render the effectual drainage of all, north of that river, if undertaken on a sufficiently general system, a very simple problem.

19. The city, immediately south of the ancient Avon, now the Floating Harbour, stands on marshy ground, beyond which is the elevation crowned by Redcliffe church. The drainage of this tract, and, indeed, of all the lowlands upon both the Frome and the Avon, has been materially affected by certain engineering operations undertaken for the improvement of the commerce of the city, and which it will, therefore, be necessary to describe.

20. The course of the Avon through the city is tortuous, and the natural rise of the tide very considerable. It was proposed to convert this channel into a Floating Harbour, retaining it always full, supplying it from the Frome and upper Avon, and shutting out the muddy waters of the Bristol Channel and lower Avon by means of gates and intermediate basins. This scheme was carried out from 1803 to 1809, by the formation of a new and direct channel for the Avon from St. Philip's Marsh to near Rownham, a distance of about 3,000 yards, including the district of Temple, most of Redcliffe, and a small part of Bedminster, in a sort of island. The harbour, thus gained, is about two miles in length, and includes an area of about 48 acres. It is crossed by the stone bridge, and by drawbridges in Clare-street, Princes-street, and St. Philip's. The communication between the Float and the upper Avon is kept up, and a supply of water introduced, by means of a feeding canal 1,848 yards in length, commencing above Neotham Dam; and direct passages between the Float and the river are established by gates at Cracroft Lock, and the Bathurst and Cumberland gates and basins. The effect of this work was to retain the level of the old Avon at or above high-water mark, and,

therefore, to injure materially the natural drainage of the low lands, and to render the sewage that discharges into the old channel much more offensive than when it found its way into a tidal stream. This evil, however, will be more appropriately treated of in another section. At an earlier period, the lower part of the channel of the Frome had been artificially widened and deepened, and this, known now as the part crossed by the Clare-street drawbridge, became of course an arm of the Floating Harbour. The ground, on its west or right bank, rises rapidly towards Back-row and Berkeley-square, and upon a moderate eminence east of the junction of this arm with the Avon, stand St. Augustine's church and the Cathedral. South of, and between these structures and the Avon, is a low and alluvial tract known as Canon's Marsh, very deficient in drainage. The strip of flat land from hence to Rownham, intervening between the skirt of the high ground and the Float, is marked by the Hotwell-road, and includes the worst-drained part of Clifton.

21. Beyond the New Cut lies the chief part of the parish of Bedminster, which is divided from a part of the ancient city by the old channel of the Avon, and intersected by the new channel. The part included between the two is a low, narrow tongue of land, partially subject to floods, and chiefly occupied by ship-building yards and manufactories. South of the Cut, the bank has been raised considerably by the earth removed from the excavation, and upon this, rows of houses and a church have been erected. Behind these, is the valley of the Maligo, or Bedminster brook, a stream which rises near Dundry, and skirts the Pyle-hill and Totter-down heights near the course of the Bristol and Exeter Railway, and in its way to the New Cut passes through a marshy flat, in which a great part of Bedminster has, in modern times, been most injudiciously built.

22. The low tracts, above described, as bordering upon the channel of the Avon, are more or less subject to land-floods. The principal of these are about the lower part of the Redland brook, below Hook's Mills; a tract, west of this, opposite Earl's Mead; various parts of the margin of the Frome; St. Philip's Marsh upon the Avon; Canon's Marsh upon the Float; the point of the island between the Overfall Dam and the Dock-gates; and a large tract of land in the inhabited part of Bedminster.

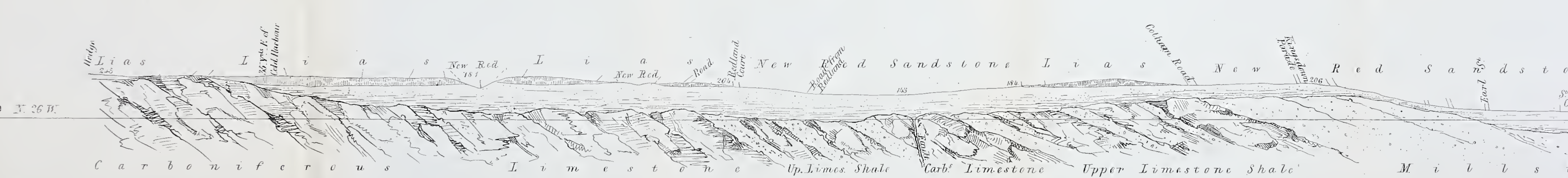
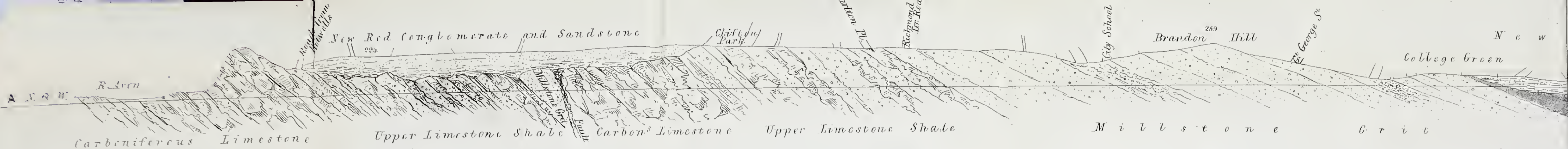
23. Although these flooded tracts are absolutely large, and almost all are mixed up with populous districts, they do not bear a very great proportion to the area of the whole city, most of which stands high, with a good natural fall.

24. **GEOLOGY.**—Bristol includes a considerable succession of rocks. Its northern heights are composed of the mountain limestone of Durdham and Clifton Downs, upon which rests the millstone grit of Clifton, Brandon Hill, Tyndall's Park, and part of Montpellier, which, in its turn, supports the coal-measures of Bed-



--- City Boundary
 A, B, &c.—Lines of Sections.

- Alluvium.
- Lias.
- New Red Sandstone.
- Millstone Grit.
- Carboniferous Limestone





Scale, 1 Inch to 180 Yards, same for height as for length. The level line represents the mean level of the Sea — The figures denote feet above mean Sea level. 305 F 125. Stoddage & Co. Litho. Ed. Jersey.

minster and Coal-pit Heath. All these rocks are more or less highly inclined, dipping towards the south and east. They are partially covered up by horizontal rocks, of which the lowest are the intermixed conglomerate beds of the new red sandstone series, and above these, the new red sandstone itself and the red marl, and upon the latter, capping a few detached eminences, the lias.

25. The new red rocks cover the coal-measures of Bedminster to a depth of about 150 feet, through which, therefore, the shafts have to be sunk, their total depth being sometimes 1,400 feet.

26. The lower parts of the city stand upon from 20 to 30 feet of alluvial deposit, intersected by the channels of the Frome and Avon, and, no doubt, deposited by their waters. Below, lies the conglomerate rock. The New Cut, or present tidal river, is entirely in the new red sandstone, upon which is built St. Mary's church, and much of Redcliffe parish. The northern part of the old city stands chiefly upon millstone grit, as does most of Clifton, upon this rock, and the upper limestone shale beneath it.

27. The northern valley, between Tyndall's Park and Durdham Down, appears to be connected with a remarkable line of fault, and is covered up with conglomerate limestone, which absorbs most of the rain-fall within the valley. Owing to this fault, the succession of rocks is partially repeated, producing a re-appearance of the great mountain limestone at Durdham Down.

28. The advantages of this geological position, in a sanitary point of view, are manifold. The conglomerates and the New Red are remarkably absorbent rocks, and the mountain limestone, from its numerous cracks and fissurés, supports, even in the wettest seasons, a turf almost as dry and pleasant to the foot as that of a chalk down.

29. For various corrections upon the appended map, and for the geological sections that accompany it, I am indebted to Mr. William Sanders, F.G.S., who is intimately acquainted with the geology of Bristol.

30. The CLIMATE of Bristol has been the subject of a series of long-continued and very careful observations at the Philosophical Institution, for the reduction of which, as given in the following tables, I am indebted to Mr. Stutchbury, F.G.S.

ABSTRACTED from the METEOROLOGICAL REGISTER kept at the BRISTOL PHILOSOPHICAL INSTITUTION, from 1841 (the year of the last Census) to 1849.*

Maximum height of barometer, Feb. 12, 1849 . 30·700
 Minimum, Jan. 13, 1843 27·975
 Range 2·725

Number of Days on which Rain has fallen.

	1841	1842	1843	1844	1845	1846	1847	1848	1849	Average
Jan. .	8	12	17	12	8	18	19	8	19	13·4
Feb. .	9	12	13	11	3	9	13	17	11	12·3
March .	10	21	9	10	5	15	9	17	10	11·7
April .	11	3	17	3	7	18	15	12	20	11·7
May .	14	13	16	2	10	10	12	3	12	10·2
June .	11	8	12	5	12	7	12	22	7	10·6
July .	13	14	13	9	13	17	6	14	13	12·4
August .	18	8	15	12	13	16	12	19	13	13·7
Sept. .	18	14	7	6	8	9	14	12	10	12·0
Oct. .	20	6	18	14	6	21	17	18	15	15·0
Nov. .	14	17	15	11	12	11	12	19	12	13·6
Dec. .	20	12	7	3	20	10	15	16	17	13·3
	166	140	159	98	117	161	156	177	159	..

* The pathway, fronting the Institution, is 23 feet above the level of the water in the floating harbour, which is 20 feet above the mean sea level; the mean sea level is at 9 feet on the scale-board outside the Lock at Cumberland Basin. The funnel of the rain gauge is 56 feet above the level of the pathway. $20 + 23 + 56 = 99$ feet above the mean sea level.

Quantity of Rain fallen.

	1841	1842	1843	1844	1845	1846	1847	1848	1849	Total.	Average
Jan. .	1·93	2·00	3·51	2·33	2·58	4·11	2·58	1·42	2·98	23·44	
Feb. .	1·89	2·09	2·29	3·40	0·81	1·53	2·17	3·99	1·21	19·38	
March .	2·93	4·13	1·34	2·62	1·43	2·69	1·87	5·10	1·85	23·96	
April .	1·36	0·14	3·60	0·36	1·46	3·55	1·91	3·67	3·10	19·15	
May .	2·74	2·20	3·64	0·40	1·16	1·49	3·52	0·62	4·26	20·04	
June .	1·40	1·38	3·20	0·48	1·11	1·49	3·51	7·38	0·58	20·53	
July .	2·19	2·92	2·32	1·96	1·06	3·52	0·70	3·25	2·24	20·16	
August .	3·53	2·05	2·87	3·08	3·34	3·07	1·37	5·25	2·05	26·61	
Sept. .	6·04	3·88	0·97	0·71	2·21	2·14	3·11	3·14	1·66	23·86	
Oct. .	4·63	1·42	5·19	2·75	1·27	5·27	5·69	3·76	3·05	33·03	
Nov. .	4·41	6·95	3·59	5·11	2·62	1·93	2·24	1·97	2·53	31·33	
Dec. .	4·62	2·01	0·53	0·66	3·90	1·24	4·71	4·41	2·26	24·34	
	37·67	31·17	33·05	23·86	22·95	32·03	33·38	43·96	27·77	..	

Average of 9 years, 31·52 inches.

Observations for Temperature taken at 9.30 a.m.

	1811	1812	1813	1814	1815	1816	1817	1818	1819	Mean.
Jan. .	36.0	36.8	43.0	42.2	41.7	42.7	40.0	37.9	42.0	40.9
Feb. .	38.2	43.2	37.6	40.0	36.0	47.9	39.9	47.3	44.8	41.1
March .	48.8	47.4	45.4	45.8	38.0	47.9	46.9	46.9	48.9	46.2
April .	52.0	51.4	52.4	52.8	53.3	52.3	49.9	52.7	47.9	51.6
May .	62.0	59.0	57.2	60.0	58.4	63.9	63.9	67.9	62.9	62.7
June .	63.2	69.6	61.6	66.4	68.5	75.9	68.4	67.9	64.9	67.4
July .	64.2	66.2	66.2	68.9	67.2	70.0	67.9	71.1	77.4	68.8
August .	68.2	68.2	66.9	63.1	65.4	69.9	67.9	62.9	57.7	65.6
Sept. .	65.6	60.8	63.4	60.0	58.9	65.5	60.0	62.1	61.7	62.0
Oct. .	51.8	48.4	51.5	55.8	55.7	55.8	56.9	54.1	53.1	59.2
Nov. .	45.0	44.0	48.3	48.4	48.7	49.9	49.9	46.0	44.3	47.2
Dec. .	46.8	48.8	46.8	37.0	44.8	33.9	45.2	44.9	38.2	42.9
Mean	53.4	53.6	54.2	53.4	53.0	56.3	54.7	55.2	53.6	..

Average for 9 years, 54.7.

S. STUTCHBURY.

34. The climate, though on the whole moist and warm, appears from the tables to be very variable in both moisture and temperature. In the nine years recorded here, the annual average of wet days has been 148; ranging from 98 to 179. The average fall of rain has been 31.52 inches; ranging from 22.95 to 43.76 inches. The temperature over the same period has had an annual average of 54.7°; ranging from monthly averages of 53.0° to 57.2°. It will be seen from the tables, that the variations both in the fall of rain and temperature from month to month in each year, and for corresponding months in different years, often vary very considerably indeed. Sir H. de la Beche observes:—

“ Including fogs and mists, rainy weather prevails for more than half the year, and the climate, as might be expected from its geographical position, is often damp at other times, so that the climate of Bristol may in general terms be characterized as mild and somewhat damp. The mildness of the climate is necessarily of great importance to the poor man, saying him that expenditure in clothing and fuel which the dampness may not require to be provided; but it will be evident that, in close ill-ventilated localities, such as many courts and lanes are, this kind of climate is one requiring well-ventilated houses and streets, with great attention to drainage, and the careful provision against slow moving open sewers and stagnant waters impregnated with filth. The prevalent winds are from the west and south-west. These sweep through Clifton and the higher parts of Bristol freely; as, indeed, from the position of these localities do most other winds. From the arrangements of the streets in the lower parts of the city, that portion of it has not equal advantages; so that in this respect, independently of differences in exposure to the sun and of temperature from different heights, Bristol and its suburbs vary materially. The temperature recorded at the Park-street Institution would chiefly correspond with that of the lower

portions of the town, and be higher than that experienced at Clifton, and in the more elevated localities of the city.

“Though there are gas and some other works evolving noxious vapours, or much smoke, on the western parts of the town, the bulk of these is to the eastward; so that, regarded as a whole, Bristol may be considered as rather fortunate in the position of those manufactories which eject noisome vapours and great volumes of smoke into the air, the chief part of them being thus on the leeward part of the town, and the vapours and smoke carried away from it.”

35. The rise of the TIDE in the Avon, though not equal to that of the Wye, is still very considerable, and offers great facilities for draining even the lowest districts. The extreme rise at springs at the dock gates is 35 feet, and that of neaps 15 feet, giving a difference of 20 feet between the two; a feature peculiar, to this extent, to Bristol. Mr. T. G. Bunt, whose name is identified with all that has been done in Bristol on this subject, states—

“The tide gauge has been kept at work, with some occasional interruptions from accident and necessary repairs, ever since August, 1837; and the times and heights of all the tides registered by it, carefully copied and preserved. These observations have, from time to time, and with great labour, been discussed, so as to render the calculations in the tide tables of successive years more and more exact. I am now engaged in examining the observations of height; I have gone through the years 1848 and 1849, and propose to add those of 1847 and 1850, with a view to the improvement of my formulæ. I am, at the same time, endeavouring to discover whether the empirical laws of our tides are undergoing actual and permanent changes, the result of local circumstances, or such only as are periodical, and dependent altogether on the positions of the celestial bodies. This question can be determined only after a long series of observations and discussions.

“During the three years and a half of my residence in London, succeeded in engaging first, Robt. Norris, Esq., of Redland, and afterwards, Mr. Wm. Burder, of Clifton, to superintend the registration of the tides, for which labour I paid annually one half the sum granted me by the Corporation. In October last, I resumed the charge of the tide gauge, re-divided the scales of time and height, and put the instrument again in excellent working order. I keep the tide clock to mean time by a meridian line, in my own house, which is true to about three seconds of time, and the transit of which can be observed to a single second.

“I have been accustomed to visit the tide gauge about three times a-week. By comparing the registered heights for last year with the calculations of my tide table, I find that the average error of each daily height, given in the table for that year, is under $4\frac{3}{4}$ inches, even without allowing for the barometric correction, which would reduce it considerably.

“The mean error in the predicted times for 1849 I have not yet brought out; but I find that for 1847, it is only $4\frac{1}{3}$ minutes on each tide, and for 1848, $4\frac{1}{2}$ minutes.

“The panic lately raised by an absurd newspaper prophecy of an approaching tide of extraordinary height, proves that the public are

well aware that predictions of those phenomena, on which they can place reliance, are a matter of no small importance.

“*Bristol, February 13, 1850.*”

36. The city includes about 140,000 inhabitants, living in about 635 streets, 506 courts and lanes, 14 squares, and about 23,000 houses, the particulars of which will follow in their proper place. Bristol possesses rather more than the usual proportion of handsome public buildings, among which should be mentioned its numerous Churches, the Mayor's Chapel, the Exchange, Guildhall, Council House, Commercial Rooms, the Public Library, the Victoria Rooms, the Asylum for the Blind, the Bishop's College, Queen Elizabeth's or the City Schools, the Red Maid's School, Colston's Almshouses, and the Merchant's Hall; evidences of opulence and liberality in both past and present generations of citizens, and which show that the men of Bristol are not to be deterred by expense alone from any plan calculated to bestow corresponding advantages upon their poorer fellow-citizens, or to improve or adorn their common city.

37. Bristol contains several MARKETS. The *New Cattle Market*, in Temple Meads, covers 4 acres, and is paved and enclosed. It is said to contain accommodation for 7,000 sheep, 5,000 pigs, 300 horses, and 1,050 head of cattle.

38. The *Exchange Market*, behind the Exchange, and *St. Nicholas Market*, are appropriated to the sale of meat, poultry, and vegetables. A *new market*, for *meat*, was erected last year by the Corporation on the site of the old shambles facing Nicholas-street. It is drained and supplied with water, covered over, and lighted with gas. The *Corn Market* is held in the Exchange.

39. The *Hay Market*, in Broadmead, is held on Mondays and Fridays, and the same site is used on other days as a *Coal Market*. The *St. James's Market*, for the sale of provisions, is held in Union-street; and there is a vegetable market at the top of *Old Market-street* in St. Philips. The *Fish Market* is held by the Quay-side, between St. Nicholas Church and the bridge, and is in a dirty condition. This is not a recognised market, but, nevertheless, it is so used. There is a *Leather Market* in Baldwin-street.

40. The proposal to establish markets in Clifton and the other suburban districts has been frequently under the consideration of the Town Council, to whom alone the power to do so belongs, and whilst, on the one hand, it has been argued that it would be desirable that these populous places should be provided with such conveniences, it has been urged, on the other, that the value of a market depends much upon the concentration of vendors and purchasers, creating competition, and thereby regulating prices; and that markets established at different parts of the City would not offer the same inducement to the country people to bring in their goods for sale, on account of the diminished number of purchasers. This view is supported by the fact, that the St. James's market, established in Union-

street, has never properly answered the purpose for which it was erected, purchasers preferring to attend the larger market in the Exchange. The question, however, does not fall within the province of this Report.

41. The COMMERCE of Bristol is chiefly with Canada, the West Indies, South America, Russia, the Mediterranean and the African coast, and she has a large coasting trade, and trade with Ireland. Timber, sugar, dye-woods, grain, and fruit, are her principal imports; metals, cottons, glass, and coal, her chief articles of export. In the past year, 1849, the tonnage inwards, included 646 vessels, together, of 129,992 tons, and outwards, 177 vessels, of 47,793 tons; and the official value of the exports for the same year was 221,965*l*. The Customs for that period produced 1,042,319*l*. Besides the above, there entered, in the Irish trade, 438 vessels, of 95,156 tons, and cleared out, 266 vessels, of 72,902 tons; and in the general coasting trade 6,176 vessels, of 333,593 tons, and 3,948 vessels of 253,482 tons. The commerce of the last year was materially greater than that of 1847, or of 1848.

42. The MANUFACTURES of Bristol are chiefly brass and copper, and iron and lead works; sugar refineries; shot, soap, glass, bottle and floor cloth manufactories; pottery, hats, tobacco and snuff, and chemical works.

43. Bristol took an active share in the establishment of the Great Western, Bristol and Exeter, and Bristol and Gloucester Railways. In her yards was built the first steam-ship, the Great Western, that regularly traversed the Atlantic; and the first steam-ship of large size, the Great Britain, that combined the novelty of iron construction with that of the screw propeller.

44. A very cursory glance over the city of Bristol will show an extraordinary number of new CHURCHES and SCHOOLS, and many of the former, St. Jude's and the Weir (just commenced), for example, are placed on open spaces, in the midst of crowded and very filthy parts of the town, to which they offer a striking contrast, and which they tend no less physically than morally to improve.

45. The Rev. Canon Barrow has at my request furnished me with the following particulars on these subjects:—

“*Churches.*—In the year 1800, the number of churches and episcopal chapels in the district now under inspection was 22, viz. :—

“The Cathedral; All Saints; St. Augustine's; Bedminster; Christ Church, Bristol; St. Andrew's, Clifton; Dowry Chapel, Clifton; St. James's; St. John Baptist's; St. Mark's or Mayor's Chapel; St. Mary Redcliffe; St. Mary-le-Port; St. Michael's; St. Nicholas'; St. Paul's, Bristol; Temple; St. Philip and Jacob's; Redland Chapel; St. Stephen's; St. Peter's; St. Thomas's; St. Werburgh's: twenty-two in all. From 1800 to 1820, there were built, none, and from 1820 to 1830 two, viz. :—St. George's Brandon-hill, and Holy Trinity Hotwells

From 1830 to 1840, were built four, viz. : St. Matthew's; St. Paul's, Bedminster; Holy Trinity; St. Philip and St. Jacob's; and the Blind Asylum Chapel. From 1840 to 1850, there were built eight, viz. :— St. Andrew's; St. Barnabas; St. John the Evangelist; St. Saviour's; St. Jude's; Christ Church, Clifton; St. Luke's; St. Mark's, Easton; total number of churches in 1850, thirty-six.

“The whole amount of accommodation in these churches is for about 31,000, which, if the supply were distributed according to the wants of the population, would be for a little more than one-fourth of the inhabitants; but, in reality, whilst the small central parishes have more than sufficient sittings in their churches, the accommodation, in the most populous districts, is not for more than one-seventh. The number of sittings for the accommodation of the poor is about 13,000, which has been lately raised to that amount by the free sittings in the new churches. Of the eight new churches consecrated during the last ten years (from 1840 to 1850) six are in the north-eastern suburb, in the out-parishes of St. Philip and St. Jacob, St. Paul, and St. George, Gloucestershire, in which quarter there has been the greatest increase of population, and chiefly of the poorer classes; these six contain 4,472 sittings, of which 3,652 are free; the other two are in the south-western or Clifton district, they contain 1,616 sittings, of which 649 are free. The sum expended in the erection of these eight churches is about 25,000*l.* There is deposited with the Ecclesiastical Commissioners for England a sum of 4,800*l.*, the balance of a special church building fund collected in the diocese, and which will be applied, as soon as endowments can be provided, and ecclesiastical districts constituted, under the Church Endowment Act, to the erection of four new churches which are much required for the accommodation of the poor inhabitants of St. James', St. Philip and St. Jacob, Temple and Redcliffe, the Hotwell-road in the lower part of the parishes of Clifton and St. George's, Brandon-hill. From this statement it appears that about one-third of the whole accommodation for the poor has been provided during the last ten years.

“*Schools.*—In the year 1844 the population of the district now under inquiry was, as nearly as I can estimate it, and in round numbers, about 128,000; the present population may be taken in round numbers at 140,000. It appears from returns made to the Bristol Diocesan Board of Education in 1844, that there were in Church of England schools for the education of the poor in the Bristol City parishes, not including Bedminster, which has since been added to this diocese, and not including portions of the out-parishes, which were then estimated with the rural population of the Deanery, but are now included within the borough, 6,325 children.

“The following statement will show the present amount of education (as far as regards numbers) as compared with the amount in numbers of 1844:—

In 1844, population then under inquiry, that is, exclusive of Bedminster, &c.	104,000
Add for Bedminster and portions of Horfield, Westbury, and the out- parishes of St. Philip and St. Jacob, and St. Paul	24,000
Entire population of district now under inquiry, in the year 1844	<u>128,000</u>
In 1850, present population	<u>140,000</u>
In 1844, children under education in Church of England schools, exclusive of Bedminster, &c.	6,325
Add for Bedminster and parts of afore- mentioned suburbs	400
Total in district now under inquiry, in the year 1844	<u>6,725</u>
In 1850, total at present under edu- cation	<u>7,184</u>

“ Hence the proportion of the whole population under education in all kinds of church schools for the education of the poorer classes was—

In 1844, about 1 in 19·03

In 1850, about 1 in 19·49

“ This result, which shows, on the whole population, no apparent increase of numbers under education, must not be taken as an indication that no exertions have been made by the church in Bristol to enlarge the means of educating the children of the poor. On the contrary, great efforts have been made during the last few years, which would have shown more favourably in the general result of the comparison between the years 1844 and 1850, had not the very large increase of poor population by the addition of the parish of Bedminster to the Deanery of Bristol so greatly extended the field of her exertions. The highest calculation I can arrive at of the numbers under education in the church schools in Bedminster is as 1 in 33·33, which shows a deficiency greater than in Birmingham at the time of Bishop Field’s report; whereas, in other parishes of Bristol, there was, in 1844, the following provision:—

In Christ Church parish for the education of	1 in 10
In St. Michael’s	1 in 12
In Clifton	1 in 14
In St. Mary Redcliffe	1 in 16
In St. Philip and St. Jacob, with Holy Trinity District	1 in 19
In St. James and St. Paul	1 in 28

“ Schools have been provided, since 1844, in the parishes of St. Simon’s, St. Andrew’s, St. Augustine’s, and St. George’s, Brandon-hill

schools are nearly completed in connection with St. Matthew's church; an additional infant school in the parish of Clifton; and daily and Sunday schools in the parish of St. John the Evangelist's will be forthwith commenced. Among the schools in Bristol which have had, and continue to have, a very beneficial effect on the condition of the poorer classes in the populous districts of St. Philip and St. Jacob's, the Hotwell-road, and the parish of Bedminster, are the large and very ably conducted schools in the parish of Holy Trinity and St. Philip, called the 'Hannah More's Schools,' and the National schools of the parishes of Clifton and Bedminster. These schools are under Government inspection, and are spoken of in terms of commendation by Her Majesty's Inspector of Schools for this district."

46. With reference to *schools* generally, I have received from the Town Clerk the document given in the Appendix (A.), whence it appears that in the city of Bristol there are 58 of what may be called unendowed day-schools of the poor, either free, or of which the charges range from 1*d.* to 2*d.*, and, in two cases, 4*d.* a-week. On the books of these schools there are 4,179 boys, of whom 3,275 are in daily attendance; 3,080 girls, of whom 2,296 are in attendance; and 2,220 infants, of whom 1,572 are in attendance: so that there are of the children of the poorer classes 9,479 on the school books, and 7,143 in daily attendance at school. This, upon the whole population, amounts to about 1 in 14·76 on the books, and 1 in 19·59 in daily attendance; or taking one-fifth of the whole population, or 28,000, to be between the ages of 5 and 14 inclusive, there will be of this number on the books 1 in 2·95, and in daily attendance 1 in 3·91.

47. Besides these, are several evening schools, of which I have obtained the names of six, but no complete account of the numbers attending.

48. The above do not include the endowed schools, of which there are five, containing 490 boys and 120 girls. There are, therefore, in the day and endowed schools, 10,089 children entered on the books, being about 1 in 2·77 of the whole population between the ages of 5 and 14 inclusive.

49. Bristol, on a GENERAL VIEW, presents many of the peculiarities of an ancient and fortified city, combined with those attendant upon a modern and rapid growth. In the old city, many of the streets are tortuous, narrow, and encumbered with ancient houses with overhanging upper stories, much admired by those who do not live in them. They are mostly crazy, lodging five to six families in accommodations intended for one, and scarcely admitting of any thorough improvement short of reconstruction.

50. The churchyards are very numerous, very full, some of them in very bad order, and almost all in crowded and poor neighbourhoods, where the susceptibility to disease is increased by the direct influences of poverty. In condemning the evils thus produced, it must, however, be remembered that the churchyards

are much older than the houses, and probably, when first consecrated, were ample for the wants, and sufficiently far removed from the dwellings, of the population. Those ancestors, whose wisdom is sometimes appealed to in justification of abuses they did not contemplate, never placed churchyards in the midst of crowded populations.

51. Of late years, much has been done in the city in pulling down houses, laying open spaces, forming public markets, and in various respects improving especially those districts of the city inhabited by the poor. That the Corporation, as becomes them, have led the way in such improvements, will appear from the list given in the Appendix (B.) There remains still much to be done. Since such courts and alleys as those near the Pithay, and along the old line of the City wall were originally constructed, immense changes have passed over society. To obtain security, it is no longer necessary to put up with the inconveniences of a walled town, crowded dwellings, occasional want of water, and severe epidemics; and, yet, to those inhabitants who reside within the City, the evils are multiplied, while the advantages are no longer peculiar to the place.

52. In most of the newly-erected additions to the city, great attention has been paid to ventilation, and the suburbs of Montpellier, Kingsdown, St. Michael's, Westbury, and Clifton, are for the most part open and well arranged; these, however, contain the dwellings of the middle and upper classes; there is still a great want of well laid out cottages for the poor.

53. On the whole, notwithstanding its numerous sanitary defects, Bristol retains a good deal of its ancient "brightness" of aspect. Its appearance, from any one of its adjacent or constituent eminences, is worthy of a city so long dominant in the west. The towers and spires of 36 churches, among which the cathedral is the most venerable, St. Mary Redcliffe the most celebrated and conspicuous, and the tower of St. Stephen's the most graceful, adorn the general view, which is besides interspersed with an unusual number of public institutions, as schools, almshouses, asylums, and buildings for educational, civic, scientific, or eleemosynary purposes.

54. The suburban scenery of Bristol is very celebrated, and no city in England is provided with so many downs and open commons, or so many public walks. Among these advantages, so great in a sanitary point of view, may be mentioned Brandon-hill, Clifton, and Durdham Down, commanding views over the Welsh hills on the one hand, and along the wide ranges of the Cotteswold and Mendip on the other; and beyond the river, Leigh Woods and the hills above Long Ashton. Most of these are within half an hour's walk from the centre of the city, every inhabitant of which is interested in their preservation from encroachment. The condition of Clifton Down, particularly, does credit to the Society of

Merchants, who are lords of the manor, and appear to be well aware that a free open space and good public walks add materially to the value of their adjacent property. The subject of encroachments upon the public grounds round Bristol is viewed with a jealous eye, and has lately occupied a large, though scarcely too large a share of public attention; and it seems highly desirable that in some public and responsible body should be vested the duty of resisting all encroachments upon a right and benefit, which, though all are concerned in, it is not the specific duty of any one to preserve.

55. If some of the subjects touched upon in this section have seemed a little foreign to the matter immediately in hand, it should be remembered that I have been called upon not only to inquire into the sanitary condition of Bristol, but to suggest remedies for the existing evils; and that this part of the question, being one partly of government and finance, is, at least, as closely connected with the social relations and commercial prosperity of the city, as with the disposition of its surface or the nature of its soil, and can by no means be satisfactorily discussed without some general reference to all.

56. **BOUNDARIES, GOVERNMENT, AND LOCAL ACTS.**—Bristol is a city and a county, and returns two Members to Parliament. The water jurisdiction of the county extends from Hanham Mills, about four miles above Bristol, down the Avon to its mouth, and thence along high-water mark up to Aust and down to Clevedon, and from the Denny Rock to the Holmes Islands, including the anchorage of King-road.

57. The city, as constituted by charter, 34 Henry VIII. (1543), comprised the 15 entire parishes of All Saints, St. Augustine, Christ-church, St. Ewen, St. John, St. Leonard, St. Mary-le-Port, St. Mary Redcliffe, St. Michael, St. Nicholas, St. Peter, St. Stephen, Temple, St. Thomas, and St. Werbergh; besides the extra-parochial Castle Precinct, and parts of the parishes of St. James, St. Paul, St. Philip and Jacob, Clifton, and Bedminster.

58. The city, as constituted by the Municipal Act, 5 and 6 Will. IV. (1835), coincides with the Parliamentary borough, and, in addition to the 15 entire parishes and the precinct named above, includes the whole of the parishes of St. James, St. Paul (known as "the district"), St. Philip and Jacob, Clifton, a part of three out of the five tythings of Bedminster, and a part of the parish of Westbury-upon-Trym.

59. As the old municipal boundary is still preserved for certain purposes, it will be referred to in this Report as the "old city," in contradistinction to the "city," which includes the new municipal area, and the term "Bristol," which is usually applied to that part of the area covered by the town.

60. The burgesses of Bristol are recognised by charter of

Henry II. (about 1164), and their liberties were confirmed by John (about 1188) in a charter still preserved by the Corporation. The ancient "Prepositus de Bristow" was by Henry III. converted into a "mayor." Edward III. is, however, regarded as the chief royal benefactor of Bristol. He confirmed and extended its liberties and privileges, fixed its constitution, and erected it into a county, with a sheriff and law courts.

61. At this time, the city is divided into ten Wards, and governed municipally by 48 Councillors and 16 Aldermen, who annually elect a Mayor. There is a separate Court of Quarter Sessions for the city, presided over by the Recorder, and, consequently, a Bench of Magistrates. The control of the police, composed of a superintendent, 5 inspectors, 25 serjeants, 216 constables, and 4 mayor's serjeants, is vested in the Corporation, and the government of the prison in the magistrates. The central police station is admirably planned, drained, warmed, and supplied with water. It contains accommodation for 53 policemen, and 10 lock-up places or cells. It is said to be the most complete establishment of the kind in the kingdom. There are three district stations; and the city, for purposes of police, is divided into four districts.

62. The management of the poor in the old city is vested in the "CORPORATION OF THE POOR," first constituted by Act of Parliament, 7 and 8 Will. III., c. 32, and modified by numerous later Acts. It consists of the Mayor for the time being, 12 members of the Town Council, appointed annually, the senior churchwardens of the 18 parishes, the senior overseer of the Castle Precincts, all for the time being, and 4 guardians for each of the 12 wards into which the old city was divided; in all 80 persons. The churchwardens are appointed by the several vestries. The overseer is elected by the rate-payers of the Precinct, and the guardians by those of the wards.

63. The Corporation of the Poor elect a governor and deputy governor. They have the entire control of all the poor receiving relief, and they discharge the duties of overseers. They are also the collectors of all parochial rates in the old city. They have a poor-house, with accommodation for 780 paupers, and which now contains 654, at Stapleton, out of the city; and another, known as St. Peter's Hospital, in a very objectionable part of the old city, accommodating 300 paupers, and at present containing 293.

64. The management of the sewers, paving, cleansing, and lighting of the old city is vested in the PAVING COMMISSIONERS, constituted under a Local Act, 43 Geo. III., c. 26 (1806). This body is composed of 38 members, two for each of the 18 parishes, and the Castle Precinct. The senior Commissioner for each division retires annually; he is re-eligible, but is seldom re-elected for above two years. The changes in the composition of the Board appear to be frequent; so much so, that the consistency of

action necessary to carry out a general plan is scarcely to be expected from a body thus constituted.

65. The qualification for office is the being a housekeeper in the division, and the possession of freehold estate of the annual value of 40*l.*, or personal estate of the value of 1,000*l.* The election is indirect. The householders of each division are annually assembled, and required to nominate 10 qualified persons (or less, if there be not so many in the district), whose names are returned by the churchwardens for the parishes and the overseers for the Precinct. The warrants, directing these elections, are issued by, and returned to, a Committee of the Town Council, who, in each July, select one person from each return to be a Commissioner for that division. All vacancies by death or other causes are filled up by the same Committee. Each new Commissioner is sworn in, and subscribes the roll. Any five of the Board form a quorum.

66. The Board meet once a fortnight. They annually elect a President and Vice-president, and Committees of the General Board, of Finance, and of Inspection. The average attendance at the Board is 19; and a fine of 2*s.* 6*d.* is imposed upon those Committeemen who do not give a sufficient reason for non-attendance.

67. The officers are a clerk, surveyor, and inspector of lighting and scavenging.

68. The Commissioners have unlimited power of rating, but every rate must be certified and approved by the justices. When thus rendered valid, it is "struck" by the Corporation of the Poor, collected by their officers, and paid over to the Treasurer of the Commissioners. All payments are made by cheques, signed by five Commissioners.

69. THE SOCIETY OF MERCHANT VENTURERS, a very ancient and chartered body in the city, though not officially concerned in its government, are the owners of very considerable, and especially house property, within it, and are trustees and managers of many of its public charities.

70. THE DOCK COMPANY, incorporated by Act of Parliament 43 Geo. III. c. 140 (1803), has very recently been purchased by, and its powers transferred to, the Corporation, by a Local Act (11th Vict., 1847-8); a most important step, by which the whole management of the Floating Harbour, into which the Frome River and many of the city sewers discharge, becomes vested in a responsible body, though, unfortunately, not in that which at present has control over the sewerage of the city.

71. Before the extension of the city boundary, the parishes of St. James and St. Paul received a Local Act, 2 Will. IV. 23 June (1832), constituting what is generally known as the "DISTRICT." This Act recites 27 Geo. III. cap. 49, and 38 Geo. III. cap. 35, Acts passed for dividing the parish of St. James, and forming out of it that of St. Paul. Its provisions

are administered by eighteen Commissioners, of whom six retire annually in the order of their election, and their places are filled up by election by the occupiers of lands, &c., being ratepayers in the district, and not in arrear. Three of the six are to be occupiers, &c., in the division to the west of Stoke's Croft and the Gloucester-road, and three in that to the east. The outgoing members may be re-elected. The qualification for a Commissioner is the possession, in his own or his wife's right, of real estate of the value of 40*l.*, or the tenancy of an estate of 40*l.* annual value.

72. In the Commissioners are vested all the public streets, footways, &c., which they also repair. They have powers to make sewers, wells, &c., to light the roads, streets, and public passages, to employ watchmen, and to provide for scavenging; they also discharge the duties of overseers of the poor.

73. They are authorised by their Act to levy a poor-rate, and, for other purposes, a general rate, the latter not exceeding 1*s.* 6*d.* in the pound on the rental, annually. Under the Municipal Act, the watching duties were transferred to the Corporation, and the power of rating for general purposes reduced from 1*s.* 6*d.* to 1*s.*

74. The Commissioners state that, in consequence of this reduction, the sums at their disposal have become insufficient to meet their duties, and, says Mr. Hare,—

“ Considering that the district would be liable to indictment if the roads were actually out of repair, they have generally confined their expenditure to such repair and to affording the largest quantity of light within their means, after deducting the sums actually necessary for a decent scavenging; but being quite alive to the great importance of sewerage, have used all their influence in inducing the proprietors of property within the district to form sewers, by furnishing the Commissioners with means for that purpose, and exercising their powers in performing the work with such occasional small pecuniary assistance as the Commissioners could give.

“ But for the anticipation of the measures proposed to be carried out by the Health of Towns' Act, the Commissioners would several years since have applied for an extension of their Parliamentary powers for raising the necessary funds for the complete discharge of their duties, including an entire reformation of the sewerage; but it would have been obviously injurious to the district to have occasioned this expenditure, or the consequent outlay of money under the uncertainty of the arrangements contemplated by that Act.”

75. With the exception of the “ District,” the whole of those parts of the city outside the Paving Commissioners' jurisdiction, that is to say, the out parish of St. Philip and Jacob, the whole of Clifton, part of Westbury, and the three tythings of Bedminster, including a population of not less than 60,000 persons, many of them very poor and much crowded together, are under PAROCHIAL GOVERNMENTS alone, differing in no respect from those of purely rural communities.

76. Within the old city, and the jurisdiction of the Corporation of the Poor and the Paving Commissioners, and in the district, the duties of the parish-officers are confined, or very nearly so, to ecclesiastical matters. In the other parts, the waywardens repair such public roads as are not included in the Turnpike Trusts; but the sewerage, footways, and, in most cases, the public lighting, remain uncared for.

77. There are upwards of 60 LOCAL ACTS relating to the city of Bristol; but those to which it may be necessary, for the purposes of the Public Health Act, to refer, are only—(1.) 38 Geo. III. 1798. An Act for separating the Out Parish of Philip and Jacob, and the Parish of St. George. (2.) 46 Geo. III. cap. 26. 1806. Bristol Paving, Lighting, and Commissioners' Act. (3.) 5 Geo. IV. 1824. An Act for Lighting and Watching the Parish of Clifton, in the County of Gloucester. (4.) 2 Will. IV. 1831-2. An Act for Repairing, Watching, &c., the district of the united Parishes of St. James and St. Paul. (5.) 1 Vict. 1837. An Act for the better Assessing and Collecting certain Parochial Rates, within the City and County of Bristol. (6.) 1 Vict. 1837. An Act for removing and preventing Encroachments, &c., and regulating Shipping, Rivers, Wharfs, &c. (7.) 1 Vict. 1837. Bristol General Cemetery Act. (8.) 3 Vict. 1840. An Act for regulating Buildings and party walls, &c., within the City and County of Bristol. (9.) 9 and 10 Vict. cap. 222. 1846. Bristol Water Company's Act. (10.) 10 and 11 Vict. 1847. An Act for extending the provisions of the Bristol Building Act. (11.) 12 Vict. 1847-8. Bristol Docks' Transfer Act.

78. FINANCE.—The corporation of Bristol levy a borough-rate, and, since their purchase of the dock, a borough-dock rate, the proceeds of which are expended, the former in the ordinary municipal expenses and maintenance of the police, the latter in the maintenance and repairs of the docks. Both these rates are collected by the Corporation of the poor, within the old city; outside of it, they are collected under the general name of poor-rate, by the several parish officers; excepting in Westbury and Bedminster, of which parishes parts only are within the municipal area, and in which the borough and borough-dock rates are collected separately.

79. The Corporation of the Poor are, as has been stated, collectors of rates for the whole city. They make rates twice annually, early in September and March. The old city is divided, for the purposes of collection, into five districts, for each of which a collector is appointed, who receives $4\frac{1}{2}d.$ in the pound, or $1\frac{7}{8}$ per cent. upon his collections.

80. The following table, supplied by the Corporation of the Poor, shows the amount of rates collected since 1842 in the old city:—

A STATEMENT of the Amount of POOR, HARBOUR, PAVING, and BOROUGH RATES levied during Years, ending September 25, 1849, in each District.

Districts.	Rate in the £.	Poor.		Rate in the £.	Harbour.		Rate in the £.	Paving.		Rate in the £.	Borough.		Total	
		£.	s. d.		s. d.	£.		s. d.	s. d.		£.	s. d.	s. d.	Rate in the £.	Ann. Amou.
1843	<i>s. d.</i>													
No. 1		4,295	18 6		556	16 1½		2,342	6 4½		2,511	12 8		
2		4,620	0 11		598	1 0½		2,512	17 4½		2,672	13 7		
3		4,224	11 3		545	3 7½		2,289	17 5½		2,430	13 2½		
4		4,047	11 9		524	12 8½		2,207	15 4½		2,378	1 11		
5		4,098	1 11		530	6 8½		2,230	14 8½		2,376	12 1½		
	2 3	21,286	4 4	0 3½	2,755	0 3	1 2½	11,583	11 4	1 2	12,369	13 6	4 11	47,994
1844														
No. 1		5,212	11 4		558	4 9½		2,392	9 7½		2,098	11 9½		
2		5,547	12 3½		599	1 8		2,567	12 6½		2,277	4 2½		
3		5,216	9 0½		564	10 11½		2,419	10 3		2,151	4 11½		
4		5,013	9 9		535	13 9½		2,296	4 0		2,011	14 0½		
5		5,003	15 7½		539	13 7½		2,312	16 10½		2,048	13 11		
	2 6	25,993	18 0	0 3½	2,797	4 9½	1 3	11,988	13 3	1 2½	10,587	8 10½	5 3	51,367
1845														
No. 1		4,719	3 1½		550	9 3½		2,359	2 9½		2,444	9 10½		
2		5,107	11 2½		595	16 3		2,553	13 6½		2,616	18 8½		
3		4,663	17 4½		544	2 2¾		2,381	18 9		2,381	11 9½		
4		4,521	10 0		527	10 4½		2,261	4 8½		2,356	7 1½		
5		4,542	11 10½		529	13 1¾		2,269	19 8½		2,340	7 11½		
	2 6	23,554	13 7½	0 3½	2,747	11 3½	1 3	11,775	19 5½	1 1½	12,139	15 5	5 2	50,217
1846														
No. 1		5,707	17 4½		559	16 10½		2,399	6 6½		2,813	4 5		
2		5,878	16 3½		580	1 11½		2,486	4 2½		2,801	12 7½		
3		5,497	4 6		543	9 5½		2,329	4 8½		2,625	12 0½		
4		5,446	6 0		531	15 4½		2,278	9 9		2,579	2 11½		
5		5,376	5 10½		528	3 8½		2,263	12 6½		2,556	6 5½		
	2 9	27,906	10 0½	0 3½	2,743	7 4	1 3	11,756	17 9½	1 4½	13,375	18 5½	5 8½	55,782
1847														
No. 1		4,853	7 1½		560	6 5		2,401	7 2½		2,718	14 4½		
2		5,158	9 7		589	12 5½		2,527	2 0½		2,869	2 1½		
3		4,698	5 0		535	17 10½		2,296	12 9½		2,588	8 7½		
4		4,625	8 2		536	15 0½		2,300	17 1		2,610	12 1		
5		4,627	5 9		532	10 2½		2,282	2 2½		2,586	8 3		
	2 9	23,962	15 7½	0 3½	2,755	2 0½	1 2	11,808	1 3½	1 5	13,373	5 6	5 8½	51,899
1848														
No. 1		5,684	13 9		558	6 9¾		2,392	17 6		2,915	15 4½		
2		5,811	14 5		573	18 0¾		2,459	17 5½		2,980	19 11½		
3		5,189	9 9½		514	11 8½		2,205	15 11½		2,647	3 5½		
4		5,507	15 3		537	16 7½		2,303	19 0½		2,816	7 4½		
5		5,369	10 6		528	12 10		2,265	13 4½		2,748	6 10		
	2 9	27,563	3 8½	0 3½	2,713	6 0½	1 3	11,628	3 3½	1 5	14,108	13 0	5 8½	56,013
1849														
No. 1		5,722	1 4½		549	5 9½		2,354	1 11		3,024	11 3½		
2		5,975	6 9		570	3 10½		2,443	18 8½		3,164	8 2		
3		5,375	6 0		508	5 0½		2,178	9 4½		2,846	16 1½		
4		5,563	2 4½		536	13 8		2,299	11 10½		2,934	19 3½		
5		5,454	11 10		522	6 5½		2,288	8 5		2,884	16 5½		
	3 3	28,090	8 4	0 3½	2,686	14 9½	1 3	11,514	10 3	1 9	14,855	11 4	6 6½	*57,147
Annual Average.	2 8½	..	..	0 3½	..	..	1 2½	..	..	1 4½	..	..	5 6½	52,917

* These sums appear to be net receipts, exclusive of the per centage allowed for collection.

81. The borough-dock rate was levied for the first time in 1848. It amounted then to 4*l.* in the pound, taken upon the general valuation of 1840, and produced, in the old city, 3,213*l.* 14*s.* 3*d.*, and in the whole municipal area 7,211*l.* 11*s.* 6*d.* As the value of the property rated has undergone great changes since 1841, the amount of the rate in the pound has also varied. A new assessment is now in progress.

82. So that the average local taxation of the old city, for the poor, borough, borough-dock, and paving rates, is 5*s.* 6½*d.* in the pound, or 52,917*l.* 9*s.* per annum.* This sum, however, amounts to rather less than 5*s.* in the pound upon the rental as rated in 1837.

83. The uses of the rate levied by the PAVING COMMISSIONERS have already been mentioned. The following is their own statement of receipts and expenditure during the last 10 years. The discrepancies between the two returns are due to the expenses of collection, and the difficulty of raising the precise sum; the excess raised is carried to the credit of the poor-rate; the 5,000*l.*, excess of expenditure, in the year 1849, was disbursed in making new sewers, and in meeting the extraordinary expenses attendant upon the cholera.

84. The salaries paid to the officers of the Board are, to the clerk, 270*l.* per annum; the accountant, 84*l.*; the surveyor, 240*l.*; and to the inspector, 170*l.* The salaries are voted annually, and sanctioned by the justices. The clerk is also entitled to law charges on contracts and other proceedings.

5. AN ACCOUNT, showing the RECEIPTS and EXPENDITURE for the preceding Year, is exhibited to the Justices at the time the Certificate of the Money necessary to be raised is presented, who carefully examine, allow or disallow, and certify the same, and it is published once in all the Bristol Newspapers, and a Copy sent to each Commissioner.

DATES . . .	1840	1841	1842	1843	1844	1845
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
RECEIPTS . .	11,000 0 0	11,000 0 0	11,500 0 0	11,500 0 0	11,500 0 0	11,000 0 0
EXPENDITURE.						
Maintaining	1,406 16 0	1,429 13 0	1,735 0 8	1,481 4 1	1,153 5 0	1,023 7 8
Lighting	1,186 4 10	1,332 13 10	1,564 14 3	1,473 18 7	1,079 2 3	1,610 10 8
Seamanship	695 17 5	1,147 15 3	1,012 18 7	536 4 3	404 19 9	359 9 7
Sewers	351 6 4	406 8 0	524 7 0	437 12 11	391 11 1	405 0 8
Cleaning	1,574 10 10	1,567 16 8	1,560 17 7	1,560 5 5	1,559 1 11	1,804 11 10
Fighting	3,845 18 0	4,116 9 8	4,144 7 2	4,167 17 5	4,169 15 3	4,176 12 4
Advertising, Printing, &c.	65 14 1	66 13 9	39 9 0	39 19 1	62 15 0	76 1 1
Salaries	123 12 0	77 8 0	116 2 0	106 0 0	107 19 4	106 0 0
Law Charges	694 0 0	694 0 0	719 0 0	709 0 0	714 0 0	736 10 0
Extraordinaries	152 8 3	140 14 8	4 16 4	32 18 10	105 3 8	90 15 0
Accidents	111 19 2	104 10 9	31 14 4	141 13 9	16 9 8	50 1 1½
Offices	85 0 5	92 17 9	83 2 7	44 5 8	27 11 9	83 18 0
	0 3 9	.	.	33 7 9	64 18 6	.
Total	£ 10,293 11 1	11,177 1 4	11,536 9 6	10,764 7 9	9,856 13 2	10,552 17 11

* It appears from Eden's State of the Poor, vol. . . , p. 202, that the average assessments for the support of the poor, in the old city, for the four periods of 10 years each, from 1750 to 1790, were—1750-60, 4,721*l.*; 1760-70, 7,074*l.*; 1770-80, 10,227*l.*; and 1780-90, 12,060*l.*

DATES . . .	1846		1847		1848		1849		Total paid in Ten Years.		Average Expenditure for Ten Years annually.	
	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.	£.	s. d.
RECEIPTS . . .	11,500	0 0	11,500	0 0	11,500	0 0	16,000	0 0	.	.	.	.
EXPENDITURE.												
Paving	1,340	10 6	1,181	9 8	1,456	19 3	1,463	0 3	13,671	6 1	1,367	2 7
Pitching	1,205	11 11	1,283	6 9	1,215	5 6	1,284	7 6	13,235	16 1	1,323	11 8
Steining	558	8 5	430	18 5	605	12 1	401	3 9	6,153	7 6	615	6 9
Sewers	877	19 5	545	3 4	1,659	3 4	4,895	17 4	10,494	9 5	1,049	8 11
Cleansing	2,158	6 0	2,114	19 5	2,173	2 6	2,575	11 3	18,649	3 5	1,864	18 4
Lighting	4,279	2 11	4,166	15 7	4,022	6 3	4,058	18 2	41,148	2 9	4,114	16 4
Advertising, Printing, &c.	72	17 11	43	12 10	127	19 2	84	9 10	679	11 9	67	19 2
Rents	106	10 10	106	0 0	106	0 0	106	0 0	1,061	12 2	106	3 3
Salaries	759	0 0	764	0 0	764	0 0	806	0 0	7,359	10 0	735	19 0
Law Charges	212	6 11	157	2 8	406	12 7	148	13 6	1,451	12 5	145	3 3
Extraordinaries	23	10 4	54	14 1	60	13 0	13	1 7	608	7 9	60	16 9
Incidents	27	1 7	63	5 4	29	10 1	33	3 4	569	16 6	56	19 7
Offices	42	6 6	17	9 8	52	14 6	84	19 3	295	19 11	29	12 0
Total	11,663	13 3	10,928	17 9	12,679	18 3	15,955	5 9	115,378	15 9	11,537	17 7

86. The Commissioners for the DISTRICT levy a poor-rate, and a paving and lighting, or general rate. The two following statements, furnished by Mr. Hare, Mr. Hitchins, and Mr. J. D. Wadham, contain the receipts and expenditure of the Commissioners since 1844, and their expenditure upon roads, lighting, &c.

87. It appears from these statements that the average local taxation of the District, amounts to about a rate of 3s. 2d. in the pound, or 3,467*l.* 13s. 7*d.* annually.

88 THE DISTRICT RECEIPTS and EXPENDITURE in respect of the POOR'S RATE from July 1844 to July 1849.

---	Rate in the £.	1844-5		Rate in the £.	1845-6		Rate in the £.	1846-7	
	s. d.	£.	s. d.	s. d.	£.	s. d.	s. d.	£.	s. d.
RECEIPTS	2 6	3,334	11 10	2 0	2,445	18 9	1 11	2,291	11 6
EXPENDITURE :—									
Poor (Union charges, &c.) . . . . .	..	929	5 4	..	910	5 8	..	910	0 0
Borough rate . . . . .	..	1,197	0 5	..	1,197	0 5	..	1,197	0 5
Dock rate . . . . .	..	.	.	..	.	.	..	.	.
Registration of Voters . . . . .	..	31	14 1	..	29	10 6	..	46	0 6
Office expenses, Salaries, &c. . . . .	..	288	15 3	..	206	9 8	..	333	0 9
	..	2,446	15 1	..	2,343	6 3	..	2,486	1 8

---	Rate in the £.	1847-8		Rate in the £.	1848-9		Rate in the £.	Total.	Rate in the £.	Average Five Year		
	s. d.	£.	s. d.	s. d.	£.	s. d.	£.	s. d.	s. d.	£.	s.	
RECEIPTS	2 2	2,446	0 5	2 3	2,802	0 6	10 10	13,320	3 0	2,664	0	
EXPENDITURE :—												
Poor (Union charges, &c.) . . . . .	..	940	0 0	..	772	17 0	..	4,462	8 0	..	892	9
Borough rate . . . . .	..	1,469	1 4	..	1,142	12 2	..	6,202	14 9	..	1,240	10
Dock rate . . . . .	..	.	.	..	307	8 4	..	307	8 4	..	.	.
Registration of Voters . . . . .	..	23	10 6	..	29	8 0	..	160	3 7	..	32	0
Office expenses, Salaries, &c. . . . .	..	266	19 10	..	274	11 3	..	1,369	16 9	..	273	19
	..	2,699	11 8	..	2,526	16 9	..	12,502	11 5	..	2,439	0

89. THE DISTRICT RECEIPTS and EXPENDITURE in respect of the REPAIRING, LIGHTING, and WATCHING RATE, from July 1842 to July 1849.

	1842-3			1843-4			1844-5			1845-6		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
RECEIPTS	872	16	3	897	11	6	1,188	0	8*	1,038	3	2
EXPENDITURE:—												
Roads	322	14	2	403	4	2	450	0	5	360	6	11
Lighting	434	0	0	437	10	3	412	6	1	456	18	6
Scavenging	20	0	0	20	0	0	20	0	0	20	0	0
Office expenses, Salaries, &c.	65	8	10	68	16	6	85	5	5	106	14	8
Balance due to Treasurer on last year. }	2	2	2	.	.	.	.	.	.	.	.	.
	844	5	2	929	10	11	997	11	11	944	0	1

	1846-7			1847-8			1848-9			Total.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
RECEIPTS	1,098	8	5†	1,090	10	7	1,131	11	3‡	7,317	1	10
EXPENDITURE:—												
Roads	809	17	4	433	11	11	501	17	8	3,281	12	7
Lighting	454	16	1	554	12	2	473	9	1	3,253	12	2
Scavenging	20	0	0	23	10	0	54	6	0	177	16	0
Office expenses, Salaries, &c.	124	15	7	95	5	3	98	0	9	644	7	0
Balance due to Treasurer on last year. }	.	.	.	.	.	.	.	.	.	2	2	2
	1,409	9	0	1,106	19	4	1,127	13	6	7,354	9	11

	£.	s.	d.
Receipts in 7 years on rate, at 1s. per the pound	7,317	1	10
Deduct sums received from other sources	116	10	0
	7)	2,000	11 10
Average	1,028	13	1

* This includes 66l. 10s. received from other sources than the rate.

† This includes 20l. received from other sources.

‡ This includes 30l. received from other sources.

90. The parochial authorities of ST. PHILIP AND JACOB WITHOUT, levy a poor-rate and a highway rate. The highway rate is expended under the direction of the Highway Board.

91. Mr. Samuel Brain, churchwarden, states the amount of the poor, borough, and borough-dock rates, to have been as follows:—

	Rate in the £.	£.	s.	d.		£.	s.	d.
1847	3s.	8,761	9	9	Including Borough Rate of	2,080	17	4
1848	3s.	9,893	17	5	„ „ „ „	2,080	17	4
					„ „ „ „ „ „ „ „	489	17	5
1849	3s.	7,536	18	7	„ „ „ „ „ „ „ „	1,820	15	2
					„ „ „ „ „ „ „ „	489	17	5

Annual average £8,730 15s. 3d.

92. The highway rate in 1849 was 6*d.* in the pound, and produced 798*l.* 5*s.*

93. The rates levied in the parish of CLIFTON are a poor-rate and a highway rate; the borough and borough-dock rate being included in the poor-rate. The average local taxation is 2*s.* 6½*d.* in the pound, producing 9,759*l.* 0*s.* 0¼*d.* annually. This sum is equal, upon the rated rental, only to a rate of 2*s.* 1¼*d.* in the pound. The particulars of these rates are shown in the statement in the following page, prepared by the assistant overseer, and the completeness of which, and the promptitude with which it was produced, are extremely creditable to that officer.

94. Clifton is a wealthy parish. Only 10 per cent. of its houses are under 5*l.*, and above 30 per cent. at or under 10*l.* rated rental, and the rates are considered to be very closely collected; yet, even in Clifton, the uncollected rates during the past six years, amount to 6,050*l.*; being an average of 430*l.* upon each shilling rate. "Of this sum," observes Mr. Hadow, who has paid attention to the subject, "240*l.* belongs to void houses, leaving 100*l.* excused by magistrates, and 90*l.* loss from other causes. These two last items come to about 4½ per cent. upon the gross amount of the rate. The sum, thus lost, represents property valued in the rate at the annual sum of 3,800*l.*, which contributes nothing towards the expenses of the parish, either in poor's-rate, highway, lighting, or church-rate. This property is chiefly situated in the courts in Berkeley-place, Jacob's Wells, Hotwell-road, &c., &c., and consists of the worst drained, least ventilated, and most ruinous dwellings in the parish, on which the landlords, most of them, expend little or nothing in the way of improvement or repairs, and contribute nothing, as I have said, towards the parish expenses. They will henceforth, I hope, be compelled to do what is requisite on both accounts."

The Year ending	Amount of Rates made.			Amount Received on each Rate.			Total Amount of Rates made in each Year.			Total Amount Received in each Year.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
March 25, 1845	3,949	10	3	3,563	15	3						
	4,020	12	3	3,683	3	9						
	4,042	2	6	3,657	9	0	12,012	5	0	10,904	8	0
„ 1846	4,158	4	0	3,731	13	0						
	4,158	18	0	3,757	16	9	8,317	2	0	7,489	9	9
„ 1847	4,216	10	6	3,819	2	9						
	4,298	9	3	3,910	11	4	8,514	19	9	7,729	14	1
„ 1848	4,391	3	6	3,992	4	6						
	6,708	5	6	6,028	11	4½	11,099	9	0	10,020	15	10½
„ 1849	5,671	19	4½	5,027	2	6½						
	6,863	5	9	6,034	6	6	12,535	5	1½	11,061	9	0½
„ 1850	7,077	0	0	6,300	0	0	7,077	0	0	6,300	0	0
	59,556	0	10½	53,505	16	9	59,556	0	10½	53,505	16	9
Loss, 10½ per cent.				6,050	4	1½						
				59,556	0	10½						
Amount of Borough Rate for the six years							25,438	16	0			
As Dock Rate for the last two years							2,113	13	2			
Making a Total paid to the City out of cash received as Poor-rate										27,552	9	2
Which, being deducted, leaves a Balance for the Poor and Incidentals of										25,953	7	7

Average amount of the Expenditure for the Relief of the Poor and Incidentals for each Year, 4,325*l.* 11*s.* 3*d.*

During the six years there have been made—

			<i>s.</i>	<i>d.</i>
8 rates at 1 <i>s.</i> in the pound,			=	8 0
1 „ 1 <i>s.</i> 3 <i>d.</i> „			=	1 3
3 „ 1 <i>s.</i> 6 <i>d.</i> „			=	4 6
				<u>13 9</u>
			=	{ 2 <i>s.</i> 3½ <i>d.</i> per annum, or
				{ 1 <i>s.</i> 1¾ <i>d.</i> each rate.

95. The next statement was prepared by the surveyor of highways, Mr. Mintorn, and shows the details of receipt and expenditure of the highway rate.

STATEMENT OF CLIFTON HIGHWAYS' RENTAL, RATES, and EXPENDITURE, from March 25, 1843, to March 25, 1849.

DATE.	Surveyor.	Amount of Rental.			Amount of Rate.			Rate in the £.	Amount of Rate received.			Void Houses, Insolvent and Poor.		
		£.	s.	d.	£.	s.	d.		£.	s.	d.	£.	s.	d.
Mar. 25, 1843, to Mar. 25, 1844	John Mintorn	79,344	15	0	991	16	2½	3	862	13	4½	129	2	9½
„ 1844 „ 1845	„	79,952	8	0	999	8	0½	3	900	12	6½	98	15	6½
„ 1845 „ 1846	„	83,438	10	0	1,042	19	7½	3	899	18	5½	143	1	1½
„ 1846 „ 1847	„	85,373	0	0	711	8	10	2	602	6	2	109	2	8
„ 1847 „ 1848	„	87,744	15	0	1,096	16	2½	3	795	1	9½	301	14	4½
„ 1848 „ 1849	„	90,561	10	0	1,132	0	4½	3	987	11	10	144	8	6
Annual Average	„	84,402	9	8	„	„	„	2½	841	7	4½	154	7	6

Parish of Clifton Highways' Rental, Rates, and Expenditure—*continued.*

DATE.	Labour.	Hauling.	Carpenters	Smith's Work and Iron- mongery.	Masonry for Sewers, &c.	Maso for Roads
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£.
From Mar. 25, 1843, to Mar. 25, 1844	215 14 1	119 11 1	3 17 8	17 0 0	18 9 3	103
" 1844 " 1845	325 12 5	131 16 9	8 1 3½	9 8 10	11 15 10	154 1
" 1845 " 1846	233 16 2	150 14 6	4 5 8	17 0 9	22 2 3	188
" 1846 " 1847	257 15 10½	121 0 10	2 14 6	13 2 7	9 19 11	64 1
" 1847 " 1848	266 4 4½	133 15 1	0 16 10	14 17 8	14 0 9	109 1
" 1848 " 1849	290 15 11	149 7 4	0 17 3	16 15 0	9 15 8	207 1

DATE.	Stones and Gravel.	Surveyor and Collector.	Professional Business.	Rent and Sundries.	Total
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
From Mar. 25, 1843, to Mar. 25, 1844	117 13 0	121 10 0	16 19 0	16 11 4	750 10
" 1844 " 1845	130 3 5	121 10 0	13 2 0	18 13 1½	824 16
" 1845 " 1846	139 0 8	121 10 0	14 15 10	17 18 10	909 13
" 1846 " 1847	112 9 0	121 10 0	12 6 4	19 7 11	734 17
" 1847 " 1848	126 12 3	121 10 0	20 0 0	23 5 0	830 19
" 1848 " 1849	143 3 2	122 2 0	15 7 0	23 3 9	979 2

J. MINTORN, Surveyor.

96. The rates levied in that part of BEDMINSTER within the city, are a poor-rate, highway rate, borough, and borough-dock rate. The two latter rates are collected by a distinct officer, and are properly stated below. I have been unable to obtain any series of parish road accounts for more than two years. The neglect, visible throughout the whole parish of Bedminster, appears to extend to its highway accounts.

97. The North Tything.—John Sweetman, surveyor. ROAD-RATE:—

Year.	Rental.	Rate in £.	Estimated Produce.	Actually collected.	Defaulters.	Not Recoverable, legally excused.
	£. s. d.	d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
1848	12,261 10 0	5	255 8 11½	180 7 6½	23 19 7	46 13 6½
1849	12,327 0 0	6	308 3 9	231 13 4½	32 2 9½	43 7 7
Annual average	12,294 5 0	5½	..	206 0 5	..	..

98. A RETURN showing the AMOUNT raised for the purposes of the HIGHWAYS in the EAST TYTHING, within the City and County of BRISTOL, together with the Amount in the Pound on the Rateable Value in each Rate for the last Two Years.

Year ending	Date of Rate.	Rateable Value.			At what in the £.	Gross Amount of Rate.			Amount collected.			Arrears.			
		£.	s.	d.		s.	d.	£.	s.	d.	£.	s.	d.		
Mar. 25, 1849	April 22, 1848	19,213	2	0	0	6	480	6	6½	341	15	9½	138	10	9
	..	19,213	2	0	0	6	480	6	6½	341	15	9½	138	10	9
Mar. 25, 1850	April 14, 1849	19,366	2	0	0	6	484	3	0½	325	0	10½	159	2	2
	March 9, 1850	19,542	12	0	0	6	488	11	3½	33	8	0	455	3	3½
Mar. 25, 1850	..	38,908	14	0	1	0	972	14	4	358	8	10½	614	5	5½
Annual Average	..	19,333	14	6	0	6	483	6	10½	260	10	1½	222	16	8½

Bedminster, April 2, 1850.

E. MALLARD, Collector.

99. A RETURN showing the AMOUNT raised for the RELIEF of the POOR in that part of the Parish of BEDMINSTER, within the City and County of BRISTOL, together with the Amount in the Pound on the Rateable Value in each Rate for the last Five Years.

Year ending	Date of Rate.	Rateable Value.			At what in the £.	Gross Amount of Rate.			Amount collected.			Arrears.			
		£.	s.	d.		s.	d.	£.	s.	d.	£.	s.	d.		
Mar. 25, 1846	July 18, 1845	32,430	12	6	2	0	3,243	1	3	2,564	3	7	678	17	8
	Jan. 16, 1846	32,289	15	0	2	0	3,228	19	6	2,517	12	6	711	7	0
Mar. 25, 1846	..	64,720	7	6	4	0	6,472	0	9	5,081	16	1	1,390	4	8
Mar. 25, 1847	July 17, 1846	32,788	0	0	1	8	2,732	6	8	2,160	12	3	571	14	5
	Jan. 15, 1847	33,042	0	0	1	8	2,753	10	0	2,179	2	11	574	7	1
Mar. 25, 1847	..	65,830	0	0	3	4	5,485	16	8	4,339	15	2	1,146	1	6
Mar. 25, 1848	July 2, 1847	33,196	0	0	2	0	3,319	12	0	2,627	14	4	691	17	8
	Nov. 19, 1847	33,293	0	0	2	0	3,329	6	0	2,498	3	0	831	3	0
Mar. 25, 1848	..	66,489	0	0	4	0	6,648	18	0	5,125	17	4	1,523	0	8
Mar. 25, 1849	April 14, 1848	33,429	0	0	2	0	3,342	18	0	2,538	9	0	804	9	0
	Oct. 13, 1848	33,472	15	0	2	6	4,184	1	10½	3,176	4	10	1,007	17	0½
Mar. 25, 1849	..	66,901	15	0	4	6	7,526	19	10½	5,714	13	10	1,812	6	0½
Mar. 25, 1850	April 13, 1849	33,636	15	0	2	6	4,204	11	10½	3,064	8	11	1,140	2	11½
	Oct. 12, 1849	33,856	15	0	2	6	4,232	1	10½	2,533	7	6	1,698	14	4½
Mar. 25, 1850	..	67,493	10	0	5	0	8,436	13	9	5,597	16	5	2,838	17	4
Annual Average	..	33,143	9	3	4	2	6,914	1	9½	5,171	19	9½	1,742	2	0½

Bedminster, April 2, 1850.

E. MALLARD, Collector.

100. BOROUGH RATE.

	Rateable Value.			Rate in the £.		Amount raised.			Rate in the £.	Borough Dock Rate.		
	£.	s.	d.	s.	d.	£.	s.	d.	d.	£.	s.	d.
January 1845	32,459	13	0	0	6½	640	9	7½	. . .	. . .	. . .	. . .
August ,,	32,402	13	0	0	8¾	866	3	8½	. . .	. . .	. . .	. . .
January 1846	32,383	0	6	0	6½	662	6	11	. . .	. . .	. . .	. . .
August ,,	32,871	17	6	0	8¾	916	3	8	. . .	. . .	. . .	. . .
January 1847	33,113	17	6	0	6½	691	8	1½	. . .	. . .	. . .	. . .
August ,,	33,245	17	6	0	9¾	1,055	0	4	. . .	. . .	. . .	. . .
January 1848	33,258	7	6	0	8	854	8	1	. . .	. . .	. . .	. . .
August ,,	33,412	15	0	0	8	853	4	8	. . .	. . .	. . .	. . .
January 1849	33,503	2	6	0	6½	665	14	3	4	402	5	9
August ,,	33,492	7	6	0	8	705	2	1	4	348	11	5
Annual average	33,014	7	1½	1	5¾	1,582	0	1½	4	375	8	7

JAMES ANTROBUS, *Overseer.*

March 25, 1850.

101. It appears therefore that the local burthens of Bedminster, within the city, are 6s. 5½*d.* in the pound, producing 8,143*l.* annually; which sum, upon the rated rental, is, however, only 4s. 9¾*d.* in the pound; so that there is an annual deficiency of about 3,071*l.*

102. That part of WESTBURY ON TRYM within the borough, pays a poor, highway, borough, and borough-dock rate.

103. Mr. Easterling, assistant-overseer, states that the poor-rates are as follows:—

	£.	s.	d.
1845, two rates at 6 <i>d.</i> in the £. each	653	10	0
1846, three rates at 6 <i>d.</i> in the £. each	1,038	2	1
1847, three rates, two at 6 <i>d.</i> and one at 9 <i>d.</i> in the £.	1,315	15	5
1848, two rates, one at 9 <i>d.</i> and one at 6 <i>d.</i> in the £.	980	1	6
1849, one rate at 9 <i>d.</i> in the £.	616	19	0
Annual average, 1s. 4¼ <i>d.</i>	920	17	7

104. The highway rate is 3*d.* in the pound, but the account is kept for the whole parish. Taking the poor-rate for a guide, the amount of the highway rate for this district would be about 162*l.*

105. The borough rates are collected by Mr. Antrobus.

PARISH OF WESTBURY-ON-TRYM (City part).

	Rateable Value.			Rate in the £.		Amount Raised.			Rate in the £.	Borough Dock Rate.		
	£.	s.	d.	s.	d.	£.	s.	d.	d.	£.	s.	d.
January 1845	13,553	5	0	0	6	286	5	10½	..	..	..	..
August	..	..	..	0	7¾	379	6	8½	..	..	..	..
January 1846	13,717	5	0	0	5½	268	18	2	..	..	..	..
August	13,802	0	0	0	7¾	384	1	0¼	..	..	..	..
January 1847	14,209	15	0	0	5¾	289	18	7¼	..	..	..	..
August	15,072	0	0	0	7¾	431	14	2½	..	..	..	..
January 1848	15,404	10	0	0	5½	312	8	2¼	..	..	..	..
August	15,845	10	0	0	5	287	4	4¾	..	..	..	..
January 1849	16,183	10	0	0	5	288	15	7½	3½	199	17	7¼
August	16,797	10	0	0	5	285	2	10¾	3	169	16	10½
Annual average	14,942	10	1	1	0½	642	15	1¾	3¼	184	17	2¾

106. The local burthens of Westbury, within the City, are therefore 2s. 3¾d. in the pound, producing annually 1,538*l.*; which sum, upon the rated rental, is only 1s. 9½d. in the pound.

107. SUMMARY OF FINANCE.—The accounts given in do not admit of being combined so as to allow of the formation of a correct summary, or of any summary at all extending over periods of years; the following is only generally correct, and it is confined, nearly so, to the finances of 1849.

DISTRICTS.	Poor Rate.			Highway and Lighting Rate.			Borough Rate.								
	Rate in the £.	Amount collected.		Rate in the £.	Amount collected.		Rate in the £.	Amount collected.							
	s.	d.	£.	s.	d.	£.	s.	d.	s.	d.	£.	s.	d.		
Old City	3	3	28,090	8	4	1	3	11,514	10	3	1	9	14,865	11	4
District	*2	3	1,142	12	2	1	0	1,111	11	3	..	..	1,076	16	3
Philip and Jacob (out)	*3	0	5,226	6	0	0	6	798	5	0	..	..	1,820	15	2
St. James	*2	3½	4,325	11	3¼	0	3	987	11	10	..	..	4,239	16	0
St. Andrew	5	0	5,597	19	9½	0	6	590	2	3	1	2½	1,370	16	4
St. Mary	1	4¾	920	17	7	0	3	162	0	0	0	10	573	18	6¼
Total	..	..	45,303	15	1¾	..	..	15,164	0	7	..	..	23,937	13	7¼

DISTRICTS.	Harbour and Borough Dock Rate.			Total Rates.			Rated Rental.						
	Rate in the £.	Amount collected.		Rate in the £.	Amount collected.		Rated Rental.						
	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.		
Old City	0	3½	2,686	14	9½	6	6½	57,147	4	8½	212,318	0	0
District	..	..	307	8	4	3	2	3,638	8	0	20,310	0	0
Philip and Jacob (out)	..	..	489	17	5	3	6	8,335	3	7	32,364	0	0
St. James	..	..	1,056	16	7	2	6½	10,609	15	8¼	90,561	10	0
St. Andrew	0	4	375	8	7	7	0½	7,934	6	11	33,856	15	0
St. Mary	0	3¼	369	14	5¾	0	9	2,026	10	7	16,797	10	0
Total	..	..	5,286	0	2¼	..	..	89,691	9	5½	406,207	15	0

* This includes the Borough and Borough Dock Rate.

108. Hence it appears that the local burthens of the city of Bristol are about 90,000*l.* per annum, equal to a rate of 4*s.* 5*d.* in the pound upon the rated rental, which however is certainly very much below the real rental, which, during the last ten years has increased considerably. It has been found impracticable to ascertain the amount of the annual deficiencies, but they appear to be not less than 16,000*l.*, which, upon an average rate of 4*s.* in the pound upon the rated rental, corresponds to property of the assessed value of 80,000*l.*, which, therefore, does not contribute towards the support of the local burthens. A large proportion of this sum, probably about two-thirds, is excused on the ground of poverty, or in other words (since the effect of excusing a rate is, of course, to raise the rent), the city of Bristol pays a premium of about 10,000*l.* per annum to the proprietors of the worst description of cottage property; of that property which contributes beyond every other to swell the poor-rate, and to demoralize the labouring classes.

109. The highway, lighting, and paving rate is that to the particulars of which special reference will hereafter be made. The sum raised under this rate over the whole city amounts to about 15,164*l.* per annum. The losses upon this rate appear to be considerable, and its proceeds would be materially increased if the owners of houses under 10*l.* rated rental were held responsible for them.

110. POPULATION, EXTENT, AND VALUE.—The population of the city, as nearly as it can be extracted from the returns given in the census of 1841, was then 140,000, of which number about 64,000 were males, and 76,000 females. The relative proportions as to age, in the old city were as follows:—

Under 15 years of age . . .	30·8 per cent.	or 43,120
Between 15 and 60 years . . .	62·2	,, 87,080
60 years and upwards . . .	7·0	,, 9,800
	<hr/>	<hr/>
	100·0	140,000
	<hr/>	<hr/>
The number of inhabited houses was . . .		21,928
Uninhabited or building		1,387
		<hr/>
		23,315
		<hr/>

So that there were six inmates, on an average, to each house.

AN APPROXIMATE STATEMENT OF THE AREA, RENTAL, POPULATION, and NUMBER OF HOUSES in the CITY of BRISTOL in 1849.

DIVISION.	Area in Acres.	Rental.		Population			1831		Population, 1841.			Houses, 1841.		Houses from the Ratebook, 1830.		
		Gross.	Rated.	1801	1811	1821	Pop.	Houses.	Males.	Females.	Total.	Inhab.	Void.		Total.	
COUNTY OF GLOUCESTER.																
<i>Old City.</i>																
		<i>Valuation of Dec. 1837.</i>														
		£.	£.													
All Saints Parish		4,621	4,109	184	150	173	180	..	82	92	174	34	13	47		
St. Augustin's Parish		37,576	32,830	5,377	6,495	7,321	8,358	..	3,999	5,243	9,242	1,198	54	1,252		
Castle Precincts, Extra Parochial		7,566	6,545	1,404	1,535	1,526	1,804	..	896	934	1,830	280	27	307		
Christchurch or Holy Trinity		8,317	7,379	690	894	1,029	1,193	..	536	556	1,092	147	28	175		
St. Ewen's Parish		1,820	1,611	117	103	99	74	..	23	32	55	10	4	14		
St. James's Parish (part of)		27,911	23,592	7,307	8,241	8,804	10,488	..	4,805	5,750	10,555	1,437	132	1,569		
St. John Baptist's Parish		6,945	6,206	700	704	757	889	..	403	535	938	147	4	151		
St. Leonard's Parish		4,867	4,335	285	329	285	302	..	133	148	281	42	11	53		
St. Mary-le-Port's Parish		3,892	3,425	289	288	302	247	..	127	150	277	37	15	52		
St. Mary Redcliffe's Parish		20,343	17,423	4,131	4,896	5,827	6,259	..	3,305	3,720	7,025	1,166	50	1,216		
St. Michael's Parish		12,440	10,728	2,786	3,103	3,445	3,836	..	1,866	2,388	4,254	625	26	651		
St. Nicholas's Parish		15,644	13,727	1,849	1,819	1,892	1,916	..	1,057	1,109	2,166	239	20	259		
St. Paul's Parish (part of)		26,981	22,879	4,958	6,056	7,320	9,146	..	4,823	5,939	10,762	1,631	65	1,696		
St. Peter's Parish		7,976	7,005	1,566	1,546	1,623	1,776	..	677	868	1,545	193	22	215		
St. Philip and St. Jacob (In) Parish		10,160	8,527	2,355	2,834	3,673	3,886	..	1,895	2,215	4,110	658	39	697		
St. Stephen's Parish		17,458	15,364	1,761	1,671	2,078	1,278	..	1,197	1,072	2,269	235	18	253		
Temple Parish		14,275	11,995	3,716	4,690	5,343	5,981	..	2,961	3,228	6,189	981	85	1,066		
St. Thomas's Parish		10,223	8,938	1,195	1,294	1,276	1,361	..	645	758	1,403	194	37	231		
St. Werbergh's Parish		6,258	5,660	146	144	116	100	..	45	54	99	22	8	30		
Total	1840	245,273	212,318	40,914	46,592	52,889	59,074	..	29,475	34,794	64,266	9,276	658	9,934	10,810	

1810

An Approximate Statement of the Area, Rental, Population, &c.—continued.

Division.	Area in Acres.	Rental.		Population			1831		Population, 1841.			Houses, 1841.			Houses from the Rate-Book, 1830.
		Gross.	Rated.	1801	1811	1821	Pop.	Houses.	Males.	Females.	Total.	Inhab.	Void.	Total.	
<i>Suburbs.</i>															
Clifton Parish	910	100,415?	90,561	4,457	6,981	8,811	12,032	..	5,453	8,724	14,177	1,907	147	2,054	2,506
		<i>Valuation, 1849.</i>													
		£.	£.												
St. James and St. Paul's (Out) Parish	490	23,338	20,310	1,897	2,427	3,605	4,495	..	2,413	3,726	6,139	1,130	101	1,231	1,306
St. Philip and St. Jacob (Out) Parish	310	39,434	32,364	8,406	10,702	11,824	15,777	..	10,402	11,188	21,590	3,543	245	3,788	4,210
		<i>Valuation, 1849.</i>													
Westbury Parish . . . .	..	18,159	16,797	..	..	..	2,715	..	1,826	2,118	3,944	628	37	665	562
COUNTY OF SOMERSET.															
Bedminster Parish:—															
North Tything . . . .	..	38,831	13,027	..	..	..	..	..	..	..	18,000	1,170	..	1,170	3,051
East Tything . . . .	..		20,829	..	..	..	..	..	..	..		1,881	..	1,881	
Total . . . .	..	220,177	193,888	..	..	..	..	..	..	..	63,850	..	..	10,789	11,635
Total Old City	1840	245,273	212,318	..	..	..	59,074	..	29,475	34,794	64,266	9,276	658	9,934	10,810
Total Suburbs . . . .	..	220,177	193,888	..	..	..	..	..	..	..	..	..	..	10,789	11,635
Grand Total . . . .	..	465,450	406,206	..	..	..	..	..	..	..	138,116	..	..	20,723	22,445

111. There were at the same period about 32,600 males living between the ages of 20 and 60, who, as a class, must be regarded as representing the rate-payers, upon whom must fall the whole pecuniary burdeus of sickness, the relief of the poor, and mortality; and who, being most interested in the economy of the city, are naturally those who should co-operate most cordially, as a class, in carrying out sanitary improvements,

112. In Bristol, as in other towns, the proportions of the different amounts of rental of the different classes of dwellings may be taken as a good index of the healthiness or unhealthiness of the people; it being known that when the proportion of low-rented dwellings is very large, there will be found an excessive amount of sickness. This arises, in part, from causes inseparable from poverty, but in a far greater degree, from the houses of the labouring poor and artizans, being constructed without any regard to sanitary requirements; the object of the owners being usually to obtain as great a return as possible for the least amount of outlay, without much regard to the condition of the tenants or the pockets of the rate-payers at large.

113. The proportion of houses in the city of Bristol whose rated rental does not exceed 10*l.* per annum, is 54·8 per cent. or 12,306, which, therefore, is the number of the dwellings of the labouring class, and this, compared with the rate already given of six inhabitants to a house, would give 73,836 labourers and artizans, or rather more than one-half of the whole population.

VALUE.—SCHEDULE of the Houses within the City of Bristol, taken from the Rate-Books, and Classified according to their rated Rentals.

	Up to £5. inclusive.	From £5. up to and inclusive of £10.	From £10 up to and inclusive of £20.	Above £20.	Total.	Proportion per Cent. at and under	
						£5.	£10.
Old City	2,323	2,557	2,633	3,297	10,810	22·4	45·14
Clifton	269	495	370	1,372	2,506	10·7	30·48
St. James and St. Paul (Out.)	157	275	458	416	1,306	12·0	33·07
St. Philip and St. Jacob (Out.)	2,561	1,215	301	133	4,210	60·8	89·69
Westbury	64	80	162	256	562	11·2	25·62
Bedminster							
East Tything	906	716	201	58	1,881	48·1	86·23
North Tything	231	457	345	137	1,170	19·7	58·80
Total	6,511	5,795	4,470	5,669	22,445	29·0	54·8

114. From this table it appears that Clifton contains the smallest proportion, or 10·7 per cent. of the very poor, or those inhabiting houses at or under 5*l.*; and the out parish of St. Philip and St. Jacob the greatest number, or 60·8 per cent. Taking, however, all the labouring classes, or those inhabiting houses at, or under 10*l.* rental, it appears that Westbury contains the fewest, or 25·6 per cent.; and the out parish of St. Philip and St. Jacob the greatest.

number, or 89·6 per cent. The scale of poverty, ascending from the poorest, for the whole city will therefore be,—St. Philip and Jacob; Bedminster, East Tything; Bedminster, North Tything; the old City; St. James and St. Paul (out); Clifton; and Westbury.

115. MORTALITY.—As I found that Dr. Kay, in addition to his thorough knowledge of the actual condition of the City, had also prepared various calculations relating to its mortality, I requested that gentleman to let me have the benefit of his labours, which request he has accordingly granted; in a manner which leaves me nothing to add to this branch of my Report, except a very cordial acknowledgment of the assistance afforded to me.

“The data which form the basis for the following tables and calculations were furnished by the Superintendent Registrars of the different districts which they embrace, and are, consequently, official returns, for the correctness of which they are responsible. To these are added tables of the births and deaths in each district of the present Municipal area. By their assistance, the results given may be readily analysed.

“For the purposes of registration, the City of Bristol is divided into the five following districts:—I. Castle Precincts, including 11 parishes: 1. Castle Precincts; 2. St. Ewen; 3. All Saints; 4. St. Leonard; 5. St. Mary-le-Port; 6. St. Werburgh; 7. St. Peter; 8. Christchurch; 9. St. John; 10. St. Nicholas; and 11. St. Stephen. II. St. Augustine, two: 1. St. Augustine; and 2. St. Michael. III. St. Mary Redcliffe, three: 1. St. Mary Redcliffe; 2. St. Thomas; and 3. Temple. IV. St. James, one: St. James. V. St. Paul, two: 1. St. Paul; 2. St. Philip and Jacob.

“The Clifton Union, called also the Clifton District, comprehends six districts:—I. Clifton. II. St. Philip and Jacob (out). III. Ashley, including St. James, St. Paul (out), and Horfield. IV. Westbury, including Henbury and Compton Greenfield. V. Stapleton, including Stoke Gifford, Winterbourne and Filton. VI. St. George’s.

“The population of the Old City, according to the census of 1841, was 64,279; 24,483 males, and 34,796 females. That of Clifton Union, 24,294 males, and 36,474 females; the latter, in both instances, considerably preponderating. This inquiry being limited, so far, at least, as it was possible to make the distinction, to the mortality, &c., of the City, several of the aforesaid districts of the Clifton Union are, of course, not introduced in the tables.

TABLE I.—BIRTHS in the City of BRISTOL for Seven Years, from 1842 to 1848, both inclusive.

DISTRICTS.	1842	1843	1844	1845	1846	1847	1848	Total Births in 7 Years.	Annual Average.	Per Centage of Popula- tion.
St. Augustine	413	423	447	436	430	423	393	2,965	423	3·1
Castle Precincts	286	333	304	300	346	309	363	2,241	320	2·9
St. James	318	326	321	292	331	293	279	2,160	308	2·9
St. Mary Redcliffe	588	506	535	521	522	521	504	3,697	523	3·6
St. Paul	559	490	536	545	552	528	531	3,741	534	3·4
	2,164	2,078	2,143	2,094	2,181	2,074	2,070	14,804	2,113	..

The births in St. Peter’s Hospital are included in those for Castle Precincts: they were, for the

TABLE II.—BIRTHS in the Districts of the CLIFTON UNION, within the City and County of BRISTOL, for Seven Years, from 1842 to 1848, both inclusive.

DISTRICTS.	1842	1843	1844	1845	1846	1847	1848	Total Births in 7 Years.	Annual Average.	Per Centage of Population.
Clifton	375	338	390	374	421	374	421	2,693	384	2·7
St. Philip and Jacob . . .	791	807	854	818	973	825	917	5,985	855	3·9
Ashley	185	159	180	187	204	215	227	1,357	194	3·1
Westbury and Henbury . .	33	59	47	57	66	62	73	397	57	2·4
	1,384	1,363	1,471	1,436	1,664	1,476	1,638	10,432	1,490	..

TABLE III.—DEATHS in the City of BRISTOL, for Seven Years, from 1842 to 1848, both inclusive.

DISTRICTS.	1842	1843	1844	1845	1846	1847	1848	Total.	Annual Average.	Per Centage of Population.
St. Augustine	315	316	299	348	250	291	301	2,120	303	2·2
*Castle Precincts	381	342	309	372	307	340	447	2,498	357	3·3
*St. James	372	327	361	428	332	424	371	2,615	373	3·5
St. Mary Redcliffe	348	363	379	427	311	378	374	2,580	368	2·5
St. Paul	329	355	390	365	315	383	390	2,527	361	2·4
	1,745	1,703	1,738	1,940	1,515	1,816	1,883	12,340	1,762	..

* The deaths in Castle Precincts and St. James include those which occurred in St. Peter's Hospital and the Infirmary, which averaged, respectively, 123 and 128 per annum; without these, the annual averages for the two districts would have been 228 and 250; and the per centages of the population 2·1 and 2·3.

TABLE IV.—DEATHS in the DISTRICTS of the CLIFTON UNION within the City and County of BRISTOL, for Seven Years, from 1842 to 1848, both inclusive.

DISTRICTS.	1842	1843	1844	1845	1846	1847	1848	Total.	Annual Average.	Per Centage of Population.
* Clifton	370	279	327	319	365	365	348	2,373	339	2·3
St. Philip and Jacob	556	516	560	513	538	550	543	3,776	539	2·49
Ashley	147	99	146	135	133	156	170	986	141	2·0
Westbury and Henbury . . .	34	37	36	44	41	49	59	300	43	1·8
	1,107	931	1,069	1,011	1,077	1,120	1,120	7,435	1,062	..

* The deaths which occurred in the workhouse, previously to its inmates being removed to Stapleton, in 1848, are included in those of Clifton; they averaged 29 per annum—without these, the annual average for the parish would have been 314, and the per centage 2·2.

The deaths, in 1843, both in Bristol and Clifton, were considerably below the average; in the former, 60, and in the latter, 131. In 1847 and 1848, the mortality in both was in excess; being, respectively, 54 and 121, and 58 and 58, beyond the average. As regards the other years, the two Tables present no marked assimilation.

The per centage of the deaths, to the population, in the Clifton table, it will be seen varies considerably, in proportion as the districts partake of a town or rural character. Thus, the average mortality of Westbury and Henbury is 18 in 1,000; of Ashley, which includes St. James and St. Paul (out), and may, therefore, be considered as a semi-rural district, 20; of Clifton, the two portions of which, Upper and Lower, present, in every respect, so marked a contrast, and thus modify the result, 23, or without the workhouse, 22; whilst in St. Philip and Jacob (out) the deaths are nearly 25 in 1,000. The relative proportion of poor, in these different localities, is likewise an important feature.

“ By comparing, in the preceding Tables, the annual average for each district, placed at the extremity of the lines, with the number of births under each year, we ascertain the year or years in which such average was exceeded or not attained; and by carrying the eye down the columns, the district or districts in which either the one or the other condition occurred: thus, 423 represents the number of births, on an average of seven years, for the district of St. Augustine; and, in the years 1843 and 1847, we observe that precisely this number took place—the greatest excess in 1844, and the smallest proportion in 1848; and so of the other districts. And again, as regards the total number of births in each year, similar observations may be made. For instance, the average for the seven years is 2,115, and the eye, in glancing along the line, will hardly fail to perceive that in any year in which this is exceeded, the following year generally shows the births to be under the average. Thus, in 1842, there were 2,164—49 above, and in 1843 only 2,078, or 37 below the average; in 1844, 2,143—28 above, and in 1845, 21 below; in 1846, 2,181, or 66 in excess, and in 1847, 2,074, or 41 less than the mean; the only exception being in the following year, 1848, where the number of births that took place was still below the average.

“ The same general principle may be remarked in reference to Tables III. and IV. (the records of the deaths), though by no means with a similar uniformity in respect to the *districts*; much the same, however, in relation to the total deaths for the different *years*. Thus, in 1842, (the average for the seven years in the Bristol districts being 1,762,) there occurred 17 less; in 1843, still fewer, or 59 below the average; and this minority is continued to the following year, 1844, being still 24 below the mean. But it is curious to remark how this diminution of deaths, for three successive years, amounting together to 100, is considerably more than made up by the year 1845, in which 1,940 deaths took place, being 178 beyond the average; and scarcely less interesting to note the result in the year succeeding this large mortality, the number of deaths in 1846 being again reduced to 1,515, by far the lowest number recorded in the Table. Again, however, the balance is somewhat restored in 1847, and still more so in 1848, taking the two years conjunctively. Thus, we have $1816 + 1883 = 3699 \div 2 = 1849$; but, upon adding the deaths in 1846, and dividing by 3, ($3699 + 1515 = 5214 \div 3 = 1738$,) the resultant figures present nearly the same triennial proportion as the first three years in the Table, ($1745 + 1703 + 1738 = 5186 \div 3 = 1728$,) the difference being only 10. Seven years may obviously, therefore, be regarded as a period fairly representing the average number both of births and deaths; and as these Tables form the key to, and basis of, the subsequent calculations and deductions, and are, on this account, given in full, to enable the reader to test their accuracy, it seemed important, by such general analysis, to establish the principle. The Clifton Tables equally supply similar illustrations.

TABLE V.—ANNUAL BIRTHS and DEATHS in the City of BRISTOL, on an Average of Seven Years.

DISTRICTS.	Annual Number of Births, on an Average of 7 Years.	Per Centage of Population.	Annual Number of Deaths, on an Average of 7 Years.	Per Centage of Population.	Average Annual Increase or Decrease of Population.	Ratio of Increase or Decrease.
St. Augustine . . .	423	3·1	303	2·2	120	·88
Castle Precincts . . .	320	2·9	357	3·3	—37	—·40
St. James	308	2·9	373	3·5	—65	—·60
St. Mary Redcliffe . . .	528	3·6	368	2·5	160	1·08
St. Paul	534	3·4	361	2·4	173	1·16
Total	2,113	3·2	1,762	2·7	351	·54

“This Table shows the ratio of the annual increase of the population in Bristol, calculated upon the surplus of the births over the deaths, on an average of seven years, to be only ·54 (3·2—2·7) or one-half per cent., an addition of 5 to every 1,000 of the population. The *decrease* in the districts of Castle Precincts and St. James is referable to the deaths in the public institutions (see remarks at foot of Tables I. and III.), those in St. Peter’s Hospital being double the number of births; and the deaths in the Infirmary nearly one-third the total deaths of the district. A similar observation applies to the parish of Clifton, in the following Table, though in a much more modified degree.

TABLE VI.—ANNUAL BIRTHS and DEATHS in the Districts of the CLIFTON UNION, on an Average of Seven Years.

DISTRICTS.	Annual Number of Births, on an Average of 7 Years.	Per Centage of Population.	Annual Number of Deaths, on an Average of 7 Years.	Per Centage of Population.	Average Annual Increase of Population.	Ratio of Increase.
Clifton	384	2·7	339	2·3	45	·31
St. Philip and Jacob . . .	855	3·9	539	2·49	316	1·45
Ashley	194	3·1	141	2·0	53	·86
Westbury and Henbury . . .	57	2·4	43	1·8	·14	·60
Total	1,490	3·3	1,062	2·4	428	·96

“The ratio of the increase of the population, in all the districts, is thus shown to be nearly 1 per cent.; this ratio varying, in the different districts, from 3 to 14 in 1,000.

“Upon comparing these tables with Tables III. and IV. it will be seen, that in those districts in which the per centage of deaths is the highest, the ratio of the increase of population is likewise the highest; or, more simply, *where the many die, the many are born*. Thus, in St. Mary Redcliffe (Table III.), 25 in 1,000 of the population died; 36 in 1,000 were born; and the ratio of increase was 1·08, or 11 in 1,000; being at the rate of 160 per annum. Again, in St. Paul, 24 in 1,000 died; 34 in 1,000 were born; and the ratio of increase was 1·16, or 12 in 1,000; 173 per annum. So, in St. Augustine, the relative proportion is 22 to 31 in 1,000, or in the ratio of 9; 120 per annum. In Castle Precincts (excluding St. Peter’s Hospital), 21 and 24, the ratio of increase being only 3 in 1,000; 30 per annum. In St. James, 23 and 29, or 6 in 1,000. Now, had the births to the deaths, in the two latter

districts, been in the same proportion as in St. Mary Redcliffe, instead of 24 and 29, they would have been 29 and 33 ($25 : 36 :: 21 = 29$, &c.), and the increase of the population in the seven years, instead of being only 212 and 405, would have been 820 and 807; and, consequently, the respective populations, in the year 1848, would have been 11,546 and 11,362; whereas, the table shows them to be only 10,938 and 10,960. A *great mortality*, therefore, so far from *decreasing*, tends directly, in a series of years, to *increase* the population. This is in accordance with what has been observed in the case of extensively fatal epidemics. Hence, the occurrence of fever or cholera, which prove fatal to so large a proportion of the labouring classes, entails a double expense upon the community at large. First, and directly, by the sickness and mortality, and widowhood and orphanage they occasion; and, secondly, and indirectly, though not less truly, by the additional numbers born, as the sequel, if not the result, of such previous mortality. And hence, it likewise follows, as a necessary consequence, palpable to those who have studied the subject, and gradually becoming more obvious to those who have not, *in the practical and irresistible form of increased poor-rates*, that the neglect of sanitary measures is the neglect of pecuniary economy; and their adoption, not more the duty, than the interest of a community.

"It might, not unfairly, be objected, that, in excluding *altogether* the deaths which occurred in St. Peter's Hospital from the calculation, in reference to the district of Castle Precincts, in which it is situated; and, likewise, those which took place in the Infirmary, from that of St. James, such total exclusion is not strictly correct, or in accordance with the actual facts; and, therefore, that the figures, so deduced, do not rigidly represent the real mortality, because, whilst admitting that the deaths in both these establishments, were not, by any means, *confined* to persons who resided during life, and, consequently, formed constituent parts of the local population of such district; it is nevertheless, true, that the *larger proportion* of them did so reside, and availed themselves of the circumstance of such proximity, when overtaken by sickness or accident, in the one case, and sickness and poverty, in the other, to obtain relief.

"Allowing the objection its legitimate weight, it simply appears to amount to this, that whilst the addition of these deaths would have *somewhat* increased the ratio of mortality in Castle Precincts and St. James, and, *pro tanto*, rendered the contrast with the other districts proportionably less striking; it would not, it is submitted, have done so to *an extent*, materially to affect the contrast itself, or the principle at issue. For, it must also be kept in view, that the fewer deaths which occurred in these public institutions from admissions from the other, and more remote districts, are equally excluded in the calculation of *their* mortality. Had the records of these establishments enabled me to make the discrimination, this apparently exceptional feature would have been avoided. As it is, in an appeal to figures, an explanation of this qualifying character seemed to be called for.

"Returning to the mortality; in St. James, including the Infirmary, it is 3.5 per cent. or 35 in 1,000 of the population, and from this district, the records of that establishment show, that out of 378 cases of fever admitted during a period of three years, 108, or nearly one-third, were from St. James. This number is, no doubt, larger than it otherwise would have been, from the circumstance of the Infirmary being

situated in this parish, and therefore proportionably more available to the sick poor of this locality.

“ But the books of St. Peter’s Hospital, from which St. James is more distant, equally show, that the fever admissions from Lewin’s Mead and Courts (Fox’s-court standing out conspicuously on the list) are very numerous. Equally decisive of the sanitary condition of this district, were the deaths which occurred from cholera and diarrhœa during the recent visitation (1849) ; 84, out of 701 for the whole city, having occurred in St. James, Castle Precincts, including the deaths in St. Peter’s Hospital, presents a mortality of 33 in 1,000 on an average of seven years. And, here, precisely similar results, in reference to the prevalence of sickness, as evidenced by the existence of fever, epidemic, and other diseases, are observable. Marsh-street and courts, in the parish of St. Stephen, and the Pithay and courts, in the parish of Christ Church and other localities, all in the district of Castle Precinct, furnishing 55 cases of fever, or one-seventh of the whole number, (378,) admitted in 1847, 1848, and 1849, into the Infirmary. The medical records of St. Peter’s Hospital merely repeat, and are a transcript of the same facts, (see Table, paragraph 120.) Cholera, as in the former instance, followed in the same track. Hence, where the 55 cases of fever occurred, 44 deaths took place from cholera and diarrhœa, independently of 197 in St. Peter’s Hospital.

“ The ratio of mortality in St. Philip and Jacob, (out,) 24, and that of St. Mary, Redcliffe, and of St. Paul, 25, and 24, respectively, in 1,000, are readily attributable to the same obvious causes. In the district of St. Paul, including the parishes of St. Paul and St. Philip and Jacob, for instance, the fever cases were 31, and the cholera deaths in St. Paul and St. Philip and Jacob, 95 and 58. We need not add to the illustration ; a reference to the local circumstances and general sanitary condition noticed in the inspection of these different districts, will amply explain the sickness and mortality which constantly prevail, and go far to account for the high ratio of mortality for the whole city ; the marvel would be were it otherwise.

“ Precisely similar results are exhibited in the Clifton, as in the Bristol table. Slightly, however, to vary the illustrations, we may take the district of St. Philip and Jacob, the population of which is large, and compare it with that of Westbury and Henbury, of which the population (of that portion, at least, within the city and county of Bristol,) is relatively small ; the latter scarcely exceeding one-ninth of the former. Now, had the increase of the population in Westbury and Henbury, advanced in the same ratio as that of St. Philip and Jacob, it would have been 245 ; whereas, it was only 97. So, in Clifton, had the same relative proportions of increase, in relation to the respective populations, obtained, that of Clifton being only one-third less than that of St. Philip and Jacob, it would have been 1,473 ; it was, however, only 496. It may be well to remind the reader, that the increase, in all the districts, is calculated, as the headings of the tables indicates, solely upon that arising from the surplus of the births over the deaths. The figures, therefore, in the column, by no means rigidly represent the actual augmentation of inhabitants in the case of any, and more especially not in that of the parish of Clifton, a large addition being made by the accession of new residents, strangers, and others, the occupants of the numerous recently erected houses. Still, this cir-

cumstance does not, of course, in the slightest degree, affect the principle. What it does, however, injuriously affect, and that to some extent, is, the per centage of deaths, shown in Table IV., to have been 22 in 1,000. In point of fact, for the reasons just assigned, this was, doubtless, really more favourable. The census of next year will supply accurate data for future calculations.

TABLE VII.—ANNUAL INCREASE of POPULATION in the City of BRISTOL for Seven Years, calculated upon the Surplus of BIRTHS over DEATHS, and excluding those which occurred in the Public Institutions.

DISTRICTS.	1841	1842	1843	1844	1845	1846
St. Augustine . . .	13,509	13,607	13,714	13,862	13,950	14,130
St. Mary Redcliffe . .	14,617	14,857	15,000	15,156	15,251	15,462
St. Paul	14,872	15,102	15,237	15,383	15,563	15,800
Castle Precincts . . .	10,726	10,715	10,776	10,837	10,818	10,896
St. James	10,555	10,612	10,732	10,803	10,774	10,898
Total	64,279	64,893	65,459	66,041	66,356	67,186

DISTRICTS.	1847	1848	Total Increase in Seven Years.	Average Annual Increase.	Ratio of Increase.
St. Augustine	14,262	14,354	845	120	·88
St. Mary Redcliffe . .	15,605	15,735	1,118	159	1·08
St. Paul	15,945	16,086	1,214	173	1·16
Castle Precincts . . .	10,960	10,938	212	30	·27
St. James	10,897	10,960	405	58	·54
Total	67,669	68,073	3,794	542	·84

TABLE VIII.—ANNUAL INCREASE of POPULATION in the Parishes of the CLIFTON UNION, within the City and County of BRISTOL, for Seven Years, calculated upon the Surplus of BIRTHS over DEATHS, and excluding those which occurred in the Public Institutions.

DISTRICTS.	1841	1842	1843	1844	1845	1846
Clifton	14,177	14,215	14,298	14,380	14,462	14,558
St. Philip and Jacob . .	21,590	21,825	22,116	22,410	22,715	23,150
Ashley	6,095	6,133	6,193	6,227	6,279	6,350
Westbury and Henbury	2,309	2,308	2,330	2,341	2,354	2,379
Total	44,171	44,481	44,937	45,358	45,810	46,437

DISTRICTS.	1847	1848	Total Increase in Seven Years.	Average Annual Increase.	Ratio of Increase.
Clifton	14,600	14,673	496	71	·50
St. Philip and Jacob . .	23,425	23,799	2,209	315	1·45
Ashley	6,409	6,466	371	53	·86
Westbury and Henbury	2,392	2,406	97	14	·60
Total	46,826	47,344	3,173	453	1·02

TABLE IX.—DEATHS of CHILDREN under Five Years of Age, in the City of BRISTOL, for Seven Years.

DISTRICTS.	1842	1843	1844	1845	1846	1847	1848	Total.	Annual Average.
St. Augustine . . .	128	147	139	159	108	94	108	883	126
Castle Precincts . .	106	93	85	98	87	86	123	678	97
St. James	125	113	144	112	111	144	103	852	121
St. Mary Redcliffe .	146	152	182	204	141	162	146	1,133	162
St. Paul	145	150	208	168	137	157	178	1,143	163
Total	650	655	758	741	584	643	658	4,689	669

In Table III., it will be observed, that the greatest mortality occurred in St. Mary Redcliffe and St. Paul—25 and 24 in 1,000 of the population, on an average of 7 years; and that the fewest deaths took place in St. Augustine and Castle Precincts—22 and 21 in 1,000. And the above Table shows that the infantile mortality in the two former was nearly 11 in 1,000, in each instance; and in the two latter 9 and 7½ in 1,000, respectively. In the district of St. James, the general deaths were 23, and those of children 11 in 1,000. The Clifton returns did not furnish data for the construction of a similar Table.

TABLE X.

DISTRICTS.	Average Annual Deaths per Centage of Population.	Average Annual Births per Centage of Population.	Ratio of Increase of Population.	Average Annual Deaths under 5 Years per Centage of Population.
St. Mary Redcliffe	2.5	3.6	1.08	1.10
St. Paul	2.4	3.4	1.16	1.16
St. James*	2.3	2.9	.54	1.09
St. Augustine	2.2	3.1	.88	.93
Castle Precincts*	2.1	2.4	.27	.76

* With a view to place the districts more nearly upon a par, the deaths and births in the public institutions are *excluded*.

“TABLE 10.—This table is instructive; it shows a high rate of *general* mortality, that is, of deaths at all ages, in conjunction with a high rate of *infantile* mortality, or of deaths of children under 5 years of age, and accompanied by a large number of births; and, consequently, by a proportionably large increase of the population. Thus, in the first district, St. Mary Redcliffe, 25 in 1,000 of the population died, and of these 11 (nearly half) were children under 5 years of age; 36 in 1,000 of the population were born; and the population was, consequently, increased in the ratio of nearly 11 in 1,000. Or, selecting the last district, Castle Precincts, (the births and deaths in St. Peter’s Hospital being excluded,) the general mortality was 21, and the infantile mortality 7½; there were 24 births in 1,000 of the population, and the ratio of its increase was, therefore, barely 3 in 1000—the converse of the former; it will be seen, in every particular: that is, the general mortality was low; the infantile mortality low; (lower, even in proportion to the general mortality, than that of St. Mary Redcliffe, (25 : 11 :: 21 = 9,) whereas it was only 7½; and the increase of the population was small. This is, surely, a striking illustration of what might not unreasonably be expected as the result of well-directed sanitary measures. For if it be conceded, (and we have the highest authority for the statement,)

that the deaths of children, from their greater susceptibility to noxious influences, furnish a very sure test of the healthy or unhealthy character of a district, then it follows that in proportion as we remove such injurious agencies we decrease their tendency to die, or, if it be preferred, increase their chances of living: and inasmuch as we have seen, that there is a very close connection and proportion between the general mortality and the infantile mortality of a population—the same measures which keep in check the one, will, in a degree, if not in the same degree, tend to restrain the other, and thus, indirectly, limit the increase of the population itself.

“These conclusions, we are aware, are at variance with the popular notion, that improving the healthiness of a locality must add to the number of its births. Directly the contrary, nevertheless, is the fact. What, then, it may fairly be asked, are the effects legitimately attributable to sanitary measures? We answer—to the mass of a community improved health and, by consequence, increased capability of enjoying existence, and earning the the means of comfortably maintaining it; diminished sickness and suffering, and less interruption, therefore, to honest labour and thrifty industry; increased years as well as chances of life, and less widowhood and orphanage—and these not trifling blessings, secured to the labouring classes, that is, in the case of Bristol, nearly two-thirds of our fellow citizens, at a great pecuniary saving to the parties themselves thus benefited, and at a much less cost to the general community than the present defective and inadequate arrangements. We might add to the list, and speak of the moral as not less real, and scarcely less palpable, than the social and personal benefits accruing to the class of society in question from the operation of the same agencies; and for the truth of the statement appeal to the working body of the clergy and lay district visitors, whose daily experience has long painfully led to the conviction, what fearful impediments the neglected sanitary condition and temporary circumstances of households present to the reception of religious truth, or the practice of virtuous principles. And that such are the results of a well-organized sanitary system is as demonstrable as any other fact in relation to the human family, which has ceased to be a matter of speculation and experiment, and taken its place amongst the ascertained facts of practical science. Nevertheless, we have so long been habituated to things as they are, that whilst admitting their susceptibility of improvement, we are disposed to question the policy of attempting it—we deprecate a change, even for the better, of which we have no experience. It is high time, nevertheless, that fallacies like these were dismissed. It is folly to tamper with life, in deference to ignorance, where the means for its preservation are attainable, or to tolerate sickness and suffering, with the resources for its mitigation or removal, within our reach. The Legislature of the country has wisely and well done its duty in this matter; and no community, labouring under the evils which it is the object of its enactments to remedy, will be otherwise than responsible for the health and well-being of its citizens, that fails to take advantage of provisions for their correction, or unnecessarily delays their application.”

116. It appears from the table calculated for and published by the Towns' Improvement Company in 1841, that Bristol was the most unhealthy part of Gloucestershire. the annual mortality there being 1 in 34; in Gloucester 1 in 44; in Stroud 1 in 53; and in

North Leach district 1 in 61. And there was an average loss of life to every individual born in Bristol of 9 years 8 months, and to every adult of 7 years 4 months. These tables also contain a calculation of the loss in money value by the excess of mortality, from which it would appear that taking the productive value of adult labour at 7s. 6d. a-week, there is an annual loss from

Sickness of . . .	£19,768
Funerals . . .	3,530
Labour . . .	140,998
	<hr/>
Total . . .	£164,296

and the approximate loss of life by each person is one-fourth.

117. CONNEXION BETWEEN SICKNESS, IMMORALITY, AND WANT OF HOUSE ACCOMMODATION AND DRAINAGE.—In addition to the medical evidence on this important subject, given below, it occurred to me that it would be very desirable to have the opinion of some of the parochial clergy upon a question which must have come more or less under their notice, and as the public voice indicated the rural Dean as having exposed himself fearlessly at the bedsides of the cholera patients in the worst parts of the city and periods of the disease, I called upon that gentleman for his personal evidence, which he produced in the form of a statement, from which the following is an extract:—

“SIR,

“*Bristol, April 4, 1850.*

“You have expressed the wish to receive from those whose experience enabled them to speak from personal observation, any information they may be pleased to communicate respecting the several matters embraced in your present inquiry. I have the honour of communicating to you a few facts and observations which I have noted in the discharge of my duties as a parochial minister during the last 19 years.

“As far back as the year 1831, I distinctly remember having been impressed with the evils which arose from the bad drainage of the city, and the want of proper arrangements for comfort, cleanliness, and decency in the habitations of the poor. I was, in that year, on a parochial committee of health in the parish of St. Paul’s, and assisted in a visitation from house to house in the district lying between Milk-street and the river Frome. It seemed to me surprising that, in the then visitation of the cholera, a quarter of the city in the immediate neighbourhood of offensive ditches and water-courses, obstructed with all kinds of filth, should suffer so little from the scourge. That district, still equally crowded and ill-drained, suffered severely under the visitation of cholera in 1849.

“In the same year (1831), being curate of the parish of St. John Baptist, I witnessed the first cases of cholera in Bristol. They occurred in Greyhound-court, in the adjoining parish of St. Leonard’s, near the Stone Bridge. The family attacked came from Bath, but were lodged in Bristol, in a locality of all others the most likely to promote the virulence of disease. Near this spot, the course of the river Frome, at that time sluggishly flowing, and with but a scanty supply of water, after

having received the sewage of a large and crowded part of the city, is impeded by the narrow arches, first of St. John's Bridge, and then of the Stone Bridge. At times, the filth and stench were almost intolerable. I have been in the habit of visiting this district between the bridges as a parochial minister for 18 years. Until a few years since, when a great improvement was effected by admitting from above a larger supply of water, and thus flushing the river, I scarcely ever knew this part of my parish free from cases of low fever. More time, I may safely affirm, was occupied by myself and my curates in visiting the sick, among a population of about 250 in this part of the parish, than is required, in ordinary times, for the discharge of similar duties to eight times the number of poor in a neighbouring parish.

"In the year 1844, I was requested, by the Lord Bishop of the diocese, to survey the populous parishes of Bristol, with a view of recommending a scheme of new ecclesiastical districts, to be constituted under an Act of the Legislature (6 and 7 Vict. c. 37), generally known by the name of "The Church Endowment Act." For the purposes of observation and inquiry, I visited all the densely-populated suburbs of the city, with the exception of Bedminster, which, at that time, was not in the diocese, and the central parishes, which, not requiring subdivision, did not fall under the operation of the Act. In the course of my survey, I went through the parishes of St. Philip and Jacob, Holy Trinity, St. Philip, St. Paul, St. James, St. George, Brandon-hill, and the lower part of Clifton. I conversed much with the poor in their houses, and ascertained as matters of deep interest to myself, and, as I thought, not altogether unconnected with the subject of my investigation, many facts relative to their temporal wants as well as their spiritual necessities. I was deeply impressed by such conversation with a feeling which I have expressed on several occasions, both in public and in private, that much of the immorality and ignorance of the lower orders may be fairly attributed to the great neglect of providing them with more comfortable and healthy dwelling-places. However much may be done by the erection of schools and churches, and the appointment of clergymen and schoolmasters, I am convinced that it will be utterly impossible to reclaim from vice and wretchedness the mass of our suburban population, without furnishing them with houses, in which it will be possible for them to practise the habits of decency, order, and devotion, which we desire to inculcate at church and in school. How, for instance, could the inhabitants of such houses as I have visited in the parish of Temple, and the new district of St. Jude be decent and orderly, when they are compelled to live, by day and by night, in rooms crowded with persons, many of them of the most abandoned character, from the sight of whose disgusting habits and the hearing of whose blasphemous and obscene words, they have no means of escape? Or how, in such times, can men and women, be they ever so well disposed, practise the duties of private devotion, self-examination, holy meditation, and prayer? How can they be healthy and cleanly in the midst of impurities, that are, to those unaccustomed to such scenes, utterly intolerable? To a population thus circumstanced, the beer-house, with all its evils, presents an irresistible temptation, and rolls back again to these squalid dwelling-places the tide of vice, maddened with lust, drunkenness, and violence. These remarks are more or less applicable to other quarters which I visited, but more especially to certain localities in the parishes of Temple and St. Jude, last mentioned.

“It is scarcely possible for those who are inexperienced in the work to conceive the trying nature of a clergyman’s duties in a district such as I have described, much less for those who live at a distance from such scenes, to appreciate the sacrifices which the poor man is obliged to make in order to snatch even a few minutes in the day from the noise and labour in which he lives, for quiet communion with God. I will briefly mention two facts in illustration of my meaning:—

“In one of the worst districts in Bristol, constituted an ecclesiastical district under the Church Endowment Act, the first clergyman appointed by the Crown was a person, I believe, of very much zeal and piety, but with little experience in the pastoral charge, therefore very ill qualified for such a post. He found himself placed, by his appointment, in the charge of 5,000 souls, without a church, without a school, with a very limited income, and not a person of property in the district to aid him in his work. He laboured, I fear with but little system and effect, yet with a sincere desire for the good of the poor people. His life was passed in the daily task of visiting, from house to house, among the ignorant and wretched. He witnessed scenes the most miserable and revolting, disease in the same room with death, and side by side with the dying and the corpse, gaming, drunkenness, and violence. The result was what might have been expected. After his mind and body had been weakened and diseased by the daily spectacle of vice and misery, he left the death-bed scene of one of these wretched ones, and died, after a few hours illness, more, I believe, from sorrow and disappointment than from the fever he had taken in the discharge of his duty. There are not, Sir, —and I speak from a long and intimate acquaintanc with the labouring clergy of this and other towns,—there are not in our profession, even if a maintenanc for them were provided, a sufficient supply of men qualified by experience for such work as this; and I am firmly of opinion that, in such localities, even the best qualified require, for the full and adequate discharge of their duties a well disciplined band of men and women (call them, for I fear not the name, brothers and sisters of mercy, or district visitors), to act with them and under their direction, in the godly work of tending the sick, and relieving their many wants.

“The other instance is that of a poor labouring man, by occupation a porter. I observed him frequently, almost daily, at the same hour coming into church, leaving his basket at the door, and after kneeling and joining with deep devotion in the church prayers for about ten minutes, retiring quietly, and proceeding on his way. I took an opportunity of questioning this man, and ascertained the truth of his statement, that he lived of necessity in a room with three men of like occupation with himself, but of very different habits of mind. He had no opportunity of privacy, and therefore contrived, without dishonesty, to obtain these few minutes from his labour, in order that he might, once a-day at least, worship the Almighty in peace. Such an instance appeared to me worth recording. It seems to corroborate the opinion of those who think that if our churches were open at all times, many, who have literally no privacy in their homes, would seek the sanctuary of God’s house, if it were but for a few minutes in the day, to offer to Him the sacrifice of their hearty prayers. I cannot doubt but that such a practice would tend greatly to promote the best interests of the poor.”

118. The connexion between want of drainage and particular classes of disease will be found to be noted in the account of the

inspection of the city; I subjoin, however, in this place, as closely connected with the mortality, a very few of the most striking cases. The track of the cholera, in 1849, has been laid down on the map of the city, at my request, by Mr. S. Goldney, who was medical officer to the old city during the presence of that disease. I regret that the small scale of the map appended to this Report has made it impracticable to embody this information upon it, but the tracks visited by the disease are for the most part coincident with those of 1832.

119. The following lists, furnished by the churchwarden and the medical officer, state the localities visited by cholera in Bedminster. Most of these localities are particularly deficient in drainage.

“ PARISH OF BEDMINSTER.

“ *Deaths, in various localities of the Parish, from Cholera, during the raging of that epidemic last year.*

Allen's-court . . . 2	Limekiln-dock . . . 1
Bright-row . . . 19	Mill-lane 1
Bull-lane 4	North-street . . . 15
Baynton's-buildings 19	Philip-street . . . 1
Bagg's-court . . . 5	Prince's-street . . 4
Bedminster-down . . 6	Parson-street . . . 1
Boot-lane 1	Regent-street . . . 1
Bedminster-causeway 1	Southey's-paddock . 11
Bedminster-place . . 1	Serjeant-street . . 2
Back-lane 2	Still-house-lane . . 5
Browning's-alley . . 3	Spring-street . . . 1
Charlotte-street . . 3	Somerset-terrace . . 1
Clarence-place . . . 4	Sion-terrace 1
Colston-street . . . 1	Somerset-street . . . 1
Clarence-square . . . 4	Sidney's-buildings . 1
Dean-lane 8	Water's-place . . . 5
Devonport-street . . 1	West-street 25
East-street 4	Windmill-hill . . . 3
Hamley's-buildings . 2	Waterloo-square . . 2
Hope-square 2	Deaths in the Cholera
King-street 14	Hospital at Wapping 35
Knowle-lane 1	
Luckwell-lane 2	Total deaths . . . 226

“ February 15, 1850.”

“ CHARLES RING, Churchwarden.

“ *Localities in which Cholera prevailed in Bedminster.*

“ Ashton-gale, North-street, West-street, Bedminster-down, Parson-street, Green's-buildings, Pump-court, Bishopport (two cases), Luckwell-lane, Thim-lane, Bright-bow, Southey's-paddock, Burdett's-court, Allen's-court, Bagg's-court, Bedminster-place, Windmill-hill, Mill-lane, Hamley's-buildings, Manley's-buildings, Union-place, Brown-row, Serjeant-street, Bishop-street, Hillgrove-street, Waterloo-square, Clarence-square, Spring-street, Mount-pleasant, in North-street, White-house-place, Little Paradise.

“ It is my opinion that cholera was mostly dependent upon defective drainage in many of these situations.

“ T. T. SMART,

“ *Medical Officer, No. 1 District.*

120. The next return was prepared by Dr. Kay, assisted by Mr. Clark, the dispenser, from the books of St. Peter's Hospital. It shows the number of cases of fever in seven districts of the city. By far the larger portion of the localities are damp, close, and crowded; of 1,940 cases of sickness recorded in 1849, 532 occurred in courts, being in the proportion of 1 in $3\frac{3}{4}$. The number of patients residing in courts is, however, not given.

STATEMENT showing the LOCALITIES in which FEVER has predominated for the last Six Years, from January 1, 1844, to December 31, 1849, inclusive.

Year.	District No. 1 Redcross-street.	District No. 2 St. Philip.	District No. 3 St. James.	District No. 4 St. Paul.	District No. 5 Temple & Redcliffe.	District No. 6 St. Augustine.	District No. 7 St. Stephen.	Total for the Year.
1844	29	57	138	48	135	25	24	456
1845	18	44	118	69	140	41	35	465
1846	18	32	155	52	101	24	41	423
Fever year— 1st half	} 19	} 25	} 160	} 22	} 57	} 23	} 45	} 530
1847 2nd half								
1849	12	14	56	33	55	12	15	197
Variola	2	3	5	4	10	1	8	33
1849	8	24	49	30	48	10	15	184
Variola	..	7	10	5	13	2	5	42

121. The outbreak of cholera, described below, in Redcliffe Parade was very remarkable, inasmuch as it attacked a succession of houses, which, though upon a high and airy situation, were, from gross neglect on the part of the landlords, in an undrained and particularly filthy state; and which, moreover, when inspected by me recently, some months after the disappearance of the cholera, were found to be in the same condition as when the disease broke out. *Mr. J. Hammond* states:—

“Nelson-place, behind Redcliffe Parade, contains 16 houses, without any drainage. They have no windows in the back fronts, nor is there any outlet of any description, except for the privies, which are in the rear of the houses in most cases, and there is a kind of cesspool to each, and every three or four years they are emptied, and then a hole is dug in the small garden in the front of the house, and the contents are there deposited.

“There is one pump of water to supply the place, but it is so bad that it is not fit for any culinary purpose, and hardly fit for house cleaning.

“The inhabitants tell me that they sometimes see living insects in it with the naked eye.

“Since the cholera, a ventilator has been made through the roofs of most of the houses; and Nos. 1 and 2 have good sewerage, and are supplied with the Company's water.

“You will find the houses well built, and standing upon a redstone cliff.

“Below, I have sent you the numbers of the houses in which the disease broke out, and the numbers of the families in each at the time:—

No. 4.—1 died; 4 families.

No. 5.—3 died; 4 do.

No. 8.—3 died; 4 do. (21 children.)

No. 9.—1 died; 4 do.

No. 10.—1 died; 4 do.

No. 12.—3 died; 33 adult inhabitants.

No. 16.—1 died; 3 families.

Consequently, with so many inmates, they form a fever nest for the district, endangering the health and lives of those residing in or near them, especially during the prevalence of any epidemic.

“The case of this row of houses shows, in a remarkable manner, the necessity of some legal enactment or regulation, forbidding the erection of houses in a populous city, under circumstances which will be sure to render them a curse to the neighbourhood, and a source of much suffering and loss of life.

“On Redcliffe Parade, immediately adjoining, where the houses are better drained and ventilated, there was not a single case of cholera.”

122. The following statement relates also to Redcliffe, though to a different disease. It is that of *Abraham Cooper*, of Portwall-lane, and was made before me in the course of the inquiry.

“The Petition of Abraham Cooper, for the removal of nuisances at the back of his premises, consisting of pigsties, large heaps of dung, and blood from the slaughter-house; the whole of the avenue being in a truly dirty and filthy state.

“The consequences arising from this have been,—

“1. I lost my daughter, aged 20 years.”

“2. I lost my dear wife, who attended her.

“3. I was laid up three weeks with the same complaint, and totally unable to attend to my usual business.

“4. I had also to take another house at a greater rent, and had to pay the rent of both premises during the whole time.

“My son, who acts as my foreman, was laid up a fortnight; and my own sister and my wife’s sister died from the same complaint, while they were kindly endeavouring to do what they could for the family.

“I believe that I can with truth say that, what with funerals, doctors’ bills, and double rent, I am fully between 30*l.* to 40*l.* a loser, not including my own loss of time, and the sacrifice of business in not being able to attend to it.

“I have also seven children left to deplore the loss of a good mother and I, the loss of a very good wife.”

Having heard reports of the injurious effects of the deficient drainage of certain houses in Richmond-terrace, Clifton, I requested a medical man, well acquainted with the circumstances to give me an account of them:—

“In the autumn of 1847, fever occurred about the same time in several houses in Richmond-terrace, in one of the best parts of Clifton. Of these cases, some died.

“There existed, at the time, a well abundantly supplied with water in the enclosure behind the Terrace, to which all the houses had access

his water was used for all domestic purposes in some of the houses ; the remainder were supplied from other sources, and never used this well. Fever occurred in 13 houses out of 35 ; that is to say, in every house where the water from the well was used ; while not a case of fever or sickness happened at the same time in those houses supplied from other sources.

“ There were two schools in this terrace, kept by two ladies of the same name. The one, where the water from the well was used, had several cases of fever ; the other school, supplied from Richmond Spring, had not a single case.

“ In one house, the master and mistress had severe fever, and the two children aggravated diarrhœa ; the three servants were altogether free from illness. It was then ascertained that the master, mistress, and children had been using the water from the polluted well, while the servants, finding the water bad, had used the rain water instead for tea and other domestic purposes. At the same time, nine cases of fever occurring in servants, were sent to the infirmary from the houses where this disease was going on.

“ It was afterwards ascertained that a sewer had broken into this well, and contaminated the water. It has since that time been fastened down, the pump secured, and the water not used ; and I believe that no case of fever has happened in the terrace since that period.”

23. The sanitary condition of Clifton was very fully examined and reported upon in 1844, by Dr. Kay, who has furnished me with a variety of statistics in continuation of his former report.

24. The Hotwell-road, hereafter described, illustrates very forcibly the influence of dirt and damp upon health, and is the more valuable, because the population there are by no means very numerous, most of them being employed by the wealthier inhabitants of Upper Clifton, and otherwise attended to by the members of a well-organized visiting society of long standing. In 1817, when the road was described by Dr. Chisholm, one-sixteenth of the population of the parish were in receipt of parish relief, and the condition of the district was pretty much what it now is. The average annual mortality of the parish was then 26 in the 1,000 ; of this mortality, 10 per cent. was in the lower parish, or the Hotwell-road division, and only 28·5 in the upper.

Its two divisions,” observes Dr. Kay, “ Upper and Lower, present a marked contrast in almost every particular ; the nature and extent of the difference are by no means reconcilable with the mere circumstances of locality ; dirt, density, and defective drainage exert a much more powerful influence in deterioration of health and the increase of mortality ; considerably more than double the number of persons, in proportion to the population, dying *below* than *upon* the hill ; and even in Upper Clifton, the deaths of young children, in the three classes of tradesmen, and mechanics, are in the ratio of 6, 12, and 15. Disease and death are more frequent in the courts than in the adjoining streets.”

25. ACCOMMODATIONS OF THE LABOURING CLASSES.—In the division of the OLD CITY, the parochial divisions, being intricate,

were necessarily, to some extent, neglected, and the premises referred to in the notes will not always be found under their proper head.

126. The parishes of ST. JAMES and ST. PAUL (within) were inspected on the 22nd instant. I was accompanied by the Town Clerk, and Dr. Kay; the Rev. J. H. Woodward, incumbent; the Rev. W. Todd, curate; and Mr. D. Vickery, churchwarden of St. James's; the Rev. A. Rogers, incumbent; Mr. T. A. Beddoe, churchwarden; and Mr. F. A. Barret, a vestryman of St. Paul. Messrs. E. Halsall and T. Green, town councillors; Mr. Smith and Mr. T. Hawkins, surgeons in the district; Mr. Goldney, medical officer of St. Peter's Hospital; Police Inspector Bell, and Bosworth; and the officers of the Paving Commissioners.

127. In St. James's parish (Appendix G. and H.), containing above 10,000 inhabitants, are 62 courts, of which 58 are closed at one end; 10 are badly scavenged thrice, and 48 twice a-week; 4 are totally neglected. In 8, the drainage is choked; 4 only supplied by the Water Company. In these courts are 308 houses and 197 privies. The parish contains 77 streets or lanes, of which 16 are well scavenged thrice, and 49 twice a-week, and 13 totally neglected. Of 1,309 houses, 158 are supplied by the Water Company, and 88 suffer from nuisances. There are 49 warehouses, slaughter-houses, and 118 houses without back windows.

128. St. Paul's parish, with 10,700 inhabitants, contains 100 courts; 50 closed at one end, 16 badly scavenged, 43 totally neglected, 2 supplied by the Water Company. Out of 394 houses, 25 suffer from nuisances. Of streets, there are 124, of which 10 are badly scavenged, and 15 neglected. Out of 2,194 houses, 1,000 are supplied by the Water Company, and 96 suffer from nuisances. There are 7 slaughter-houses, and 55 warehouses and manufactory.

129. The following are the notes taken during the inspection of *Lewin's Mead Almshouses* are a row of houses now deserted, rather, retaining only one inhabitant, whose hovel is in a very miserable condition. It is one story high, ruinous, and the passage is charged with heaps of rubbish and manure. There are no windows. This is probably about the worst place in the city. The lower end, is a vacant space on the Frome, a depôt for refuse &c., from an adjacent manufactory. *Cannon's-court* is set thick with houses of a very bad description. In an interior court, are kept. In another court, behind a lodging-house, are heaps of manure, a stable, and a privy without a seat, placed near the passage. The paving is very bad. At the back of the adjoining house, is a worse court, containing also an open privy and pump, with a large heap of manure and a stable. The condition of this passage and of the adjoining lodging-house, is much complained of; the passage as bad as it is, it is stated to have been much worse before the ap-

ance of the cholera. These are strong cases in favour of the absolute necessity for compulsory powers upon landlords. In a third court, pigs are still actually kept, and there is a heap of manure. *Taylor's-court*.—A large court, with 11 houses. At one end, is a rain-tank, containing much rubbish, without a pump, and at present dry. There is a public privy in an extremely disgusting state under a sleeping-room. There are two cesspools complained of. These cottages are much over-crowded, chiefly with Irish. Fever is frequently here, and the cholera was severe. The people buy their water at the rate of a penny for two small buckets. Opposite this, is another intricate place called *George's-court*, with a privy under the stairs. Here are complaints of want of water. A common practice in this district is to get water from the public-houses on condition of taking a certain quantity of beer. In *Prince Frederick-court* is a manure depôt. *Deep-street* has a narrow, central gutter, into which house refuse is thrown. There are great complaints of the gutter-grate being untrapped, and out of order, and of the smells arising through it. In a court near Mrs. Gillam's, is a privy running over from the seat, very filthy. Here are heaps of ashes. In *Bucket-well-court*, the cellars very wet. The privy is in an area, and covered with ordure. Behind the *Bristol Infirmary*, is a very neat, well kept garden, in a fine airy situation. The utter neglect of their duties by the class of cottage landlords is strongly exemplified in the condition of this district, which, notwithstanding that it was ravaged by the cholera, and most thoroughly cleansed by the public authorities, is fast relapsing into its former condition; nor did I observe any symptoms of such permanent improvements as paving, water supply, or ash-pits. Specific complaints were made of the want of drainage in the houses No. 9 and 10 on St. James's churchyard, and of the nuisance created by their privies and cesspools, in a very crowded neighbourhood.

130. "*First Garden*," out of Eugene-street, one of several courts, on the Hill side. Some of these are crowded and damp, others open, dry, and remarkably airy. The general position is good; but there are no sewers. The cholera was dotted all along through this street. There is a sewer in *Eugene-street*, with but few gutter-grates. Mr. Armstrong states, as the reason for this, that the smell from them is so bad. *Breakneck-street* bears marks of recent scavenging; it is stated to be much improved *within the last fortnight*. *Little West-street* has no drainage, but is open at both ends. In most of this district there are sewers and house-drains, but there is a great deficiency of water. About the Barton are some *Corporation Improvements*. Beneath the two Arcades are cellars, said to be drained, but dark and very deficient in ventilation. The smells are dreadful. These places are cleanly kept, but quite unfit for the occupation of human beings. *Merchant-street* is in a crowded neighbourhood; there is a tan-yard here, the smell of which is

much complained of. In *Hammond's-buildings* the gutter-grates, though apparently new, emit offensive smells. Near this, is a ragged school for 250 children, supported by the Society of Friends. The arrangements are admirable. The school-room, a part of the ancient Black Friars, is a handsome airy chamber. The play-ground is dry and clean, and furnished with gymnastic poles, &c., for the boys. *Philadelphia-street*.—In this quarter cholera raged. It lies low, and near the Frome.

131. The district of *St. Paul* (within) was thoroughly well inspected during the cholera, and bears, everywhere, marks of recent cleansing; this, however, consists in the removal of rubbish and refuse, and its continuance involves a degree of activity which can scarcely, under ordinary circumstances, be expected. *Penn, Hampton, Llewellyn, and other streets and courts*, have large gutter-grates, and heaps of ashes thrown out into the public ways; there being no dust-bins. In *Newfoundland-street*, a house has been built upon the open ditch; recently, the Commissioners have put in a very complete culvert, but the smell from the lower parts of the ditch, and from a large gutter-grate, is most offensive. These improvements have been made in consequence of the representations of Mr. Goldney, just before the occurrence of cholera. Great credit is due to the Society of Friends for their close attention to this district. In *Cross-gardens*, the cholera prevailed. Here are no made roads. In the footpaths are ash heaps. These houses are on the edge of the flat, but above it. There is a large tract of houses, about here, wholly undrained, and with the highways unmade. *Victoria-street* suffers from the neighbouring open ditch. The whole of this quarter, including Portland and Brunswick-squares, and containing many excellent houses, has become much depreciated in value, partly by change of fashion, and partly from a want, until very recently, of effectual drainage. *Wilder-street* is long and narrow, badly paved, and badly scavenged, with open gutter-grates. There are various nuisances at the back. *Two Trees'-passage* is very close and narrow.

132. The district, just described, was visited severely by cholera in 1849. A part of it lies low and near the Frome, and the people are lodged in courts deficient in ventilation, light, and drainage, decent privy accommodation, and proper water supply. The public authorities took advantage of the dread inspired by the approach and presence of cholera to remove ashes and manure-heaps, whitewash interiors, close pigsties, and effect other temporary remedies. The landlords, as a class, appear to have given no assistance; usually they oppose sanitary interference; under this pressure they were passive. The powers of the authorities extended only to the removal, not the prevention, of nuisances; and now that the cholera has departed, these are very rapidly re-appearing. It would be difficult to find a stronger instance of the necessity for some general measure of sewerage, combined with

powers to compel the construction of decent house accommodation, than is afforded by the recent experience of this district.

133. The parishes of ST. MICHAEL and ST. AUGUSTINE, and part of the ecclesiastical division of ST. GEORGE, Brandon-hill, were inspected on the 25th of February. I was accompanied, as usual, by the Town Clerk and Dr. Kay. There were also present the Rev. W. Knight, rector of St. Michael's; the Rev. W. Knight, junior, curate; the Rev. R. B. Paul, vicar of St. Augustine's; Mr. H. Gore Langton; Mr. S. Goldney; Dr. Green; Mr. Halsall; Mr. A. Smith, district surgeon; Mr. W. H. Trotman, and Mr. W. K. Sheppard, surgeons; Mr. J. P. Burton; Mr. Mallard; Mr. T. Stone; Mr. J. Armstrong; Mr. J. J. Birtell; Mr. White; Mr. W. Price, clerk of St. Nicholas; Mr. Bell; Mr. Attwood; and Mr. H. P. Webb, inspectors of police. Almost all, either holding some public office, or resident in the district.

134. St. Michael's contains 4,250 inhabitants. The police returns (Appendix G.) enumerate 15 courts, of which 13 are closed at one end, and none are supplied by the Water Company; 37 streets or lanes, all well scavenged, and containing 214 houses, of which 50 have no back windows, and 56 suffer from nuisances: 52 houses are supplied by the Water Company. St. Stephen's contains about 2,300 inhabitants, and only 3 courts and 15 streets, all well scavenged, and in other respects in pretty good order. St. Augustine's contains 9,000 inhabitants. There are only 3 courts, all of which are unscavenged, and 51 streets, all of which are clean; 83 houses in courts, and 113 in streets, have no back windows. Parts of these parishes are on a steep hill side, and parts in very low damp ground on the margins of the Frome and Avon. There are many street sewers, and very few cesspools; but the house-drains pass under the houses, and produce a great deal of expense and annoyance. Water is extremely scarce in parts of these parishes, and in other parts the wells are tainted by defective drains.

135. The following are the notes taken during the visit:—

Z Alley branches out of Host-street up the steep hill side. It is a long, narrow passage, with a privy at the top. In front of this, was formerly a large heap of refuse; a line on the walls still marks its height. In *Steep-street-alley*, is a public privy in a dwelling room. *Jeffery's-court* is very intricate, and built at different levels. The inhabitants near this complain of bad smells from the gutter-grates in the streets. The back premises of a house in Host-street are at a higher level than the house, and there is a filthy privy and a defective water-drain. In Pipe-lane is an offensive urinary. Near this, is *Princess Amelia-court*, where was an oozing from a privy into the public passage through the wall. This has lately been remedied. *Fear's-court*, in Frogmore-street, is very clean, paved, and tolerably airy. Three deaths from cholera here were attributed to a putrid cat in the water-butt.

The drainage is deficient, and there are only skylights behind. In *Kent's-yard*, is a piggery and slaughter-house. *Crab's-well-court* is very narrow, and has an offensive gutter-grate. *Jones's-court* is also very narrow, but clean. The drainage is defective; at one end, is a public privy, much complained of. There is frequent sickness in the house next to the privy. *Russell's-place*, also very narrow, is kept very clean. *Frogmore-street*.—At the back of a butcher's shop is a court, surrounded by houses, and converted into a piggery. The adjacent slaughter-house gives out a most offensive smell. *Warren's-court* is on low and flat ground. Here are two privies in a filthy condition, and an offensive gutter-grate. These grates are new, and well fixed; but, without water, no trap will work efficiently. In *Lamb-street*, is a slaughter-house and a public manure heap. Near this, are other slaughter-houses, in an unpaved court, badly drained. In *Stephen's-court*, is a room below the level of the ground, having no ventilation, except through the door. Two windows, looking into an area, and opaque with dirt, are blocked up. The privy is against the house wall, and above the floor level. *There is a pump and a sink, with an offensive drain, one foot from the bed-head; and there are two beds in the room, which contains a family of ten persons.* Above this, is another room also crowded.

136. *Park-square*.—In consequence of Mr. Goldney's representations, during the cholera, a large central dung-heap has been removed, the surface pitched with a good fall, drains laid, and paved footpaths formed. For the rest, the houses remain much as before, no corresponding improvements having been made by the householders. There is a great want of house-drains; no water is laid on, and the pump is often dry, and always tainted. *Anchor-lane* is a narrow and extremely filthy footway; much of the refuse of a filthy neighbourhood appears to be thrown out into it. This lane and the preceding square are thus described by the visiting members of the Committee of the "Association for the Improvement of the Public Health:"—

"General appearance, dirty and neglected; gout choked, causing a large pool of foul standing water. This is frequently the case; not emptied or relieved for four or five months. Pump out of repair for a long time previously to the last two months; water good before, but since the repairs, complained of as 'not wholesome,'—'not fit for use'—'quite a nuisance.' A glassful, which was obtained at the moment, presented an appearance similar to water in which tan or tobacco had been infused, but of a much more objectionable odour and taste, obviously arising from the communication of the well with a sewer or cesspool: 23 houses dependent for their supply of water upon this pump; obtain it now from an adjoining court, but will not be allowed to do so during the summer months. One house, consisting of six rooms and a kitchen, occupied by six different tenants. Steps lead from the square to a long, narrow lane at the back of one side; at the foot of the steps, is a large heap of ashes and refuse, rising two feet

above the level of the lane, and extending to the opposite wall, on which is a notice offering a reward for the prevention of such deposits! The lane itself, which your reporters believe is private property, is in a most neglected and disgraceful condition. A gate, at one extremity, formerly prevented the passage of carts, &c., but since its discontinuance, years ago, deep permanent ruts have been worn in the whole breadth of the lane, which presents a mass of mud, filth, and water, barely allowing of passage on foot. A large open drain, connected with the houses in the square, the mouth of which is choked, empties itself into the lane, and is most offensive; it is opposite to lamp 1105. A little beyond, are a group of cottages, the occupants of which complained grievously of the nuisances to which they were thus subjected. 'A shocking place'—'When rain falls it is terrible,' were their expressions. Another heap of ashes, &c. was deposited at the entrance to the row of houses. 'Water only used for cooking vegetables;' it leaves considerable sediment; liable to be without water during the hot months. Gouts choked, and other arrangements constantly out of order, occasioning unseemly deposits, alike offensive to decency and health."

137. *Webber's-court* is long, narrow, and very damp. Much has been done in removing filth since the cholera in 1832, when it was depopulated. The privies are still very filthy, and the drains choked. In one house is a cellar-room with a bed-room, apparently intended as a coalhole, being partially under the street. On each side of the public steps is a privy in a very bad state. The steps dangerous for want of railing. The following description of this court was recorded by the visitors in 1848. Any difference in its present condition is due to the removal of filth by the local authorities during the cholera; the landlords have made no permanent improvements:—

"*Webber's-court* is within a short distance of the above; and in describing this court, your reporters feel the difficulty of conveying anything like an approach to the actual truth, without incurring the risk of employing terms unsuited to the medium of a public journal, and at variance with the decorous restraints imposed by propriety and good taste. A large margin being left for unavoidable suppressions, the following is a very imperfect outline of presentable details:—The court is approached by a flight of steps, and is, consequently, considerably lower than the adjoining street. Below, and at each side of the steps, were large pools of fluid, which might, but must not, be more particularly described. The pavement everywhere broken and uneven; the hollows and irregularities, thus formed, being filled with liquid filth. One house, the door being open, your Committee entered, and found it tenanted by a civil, respectable woman, whose husband is coachman in a Clifton family. Complaining of the offensive effluvia of the room, she explained, that with a view to render it endurable, she was compelled to keep the doors in the front and at the back both open, to produce a thorough draft; that it was frequently much worse, and after the house had been closed during the night, the smell in the morning was so bad, that 'she could not eat her breakfast till she had first burnt paper and used vinegar, to get rid of it.'

“ There was formerly a pump in the court, but it had been useless for a long period ; water procured from a considerable distance ; gouts constantly choked up by matters whose locale should have been elsewhere : other arrangements, altogether indescribable, rendering the observances of ordinary decency utterly impracticable. Directly opposite, and within three yards of several of the houses, is a high wall, coated with green, and begrimed with dirt. The ashes are removed twice a week, and in the intermediate days must be either retained in the rooms or thrown into the public street ; which latter was the case at your reporters’ visit. And this court, too abominable for description, has been, to the knowledge of one of your Committee, in its present disgusting condition for the last ten years.

“ To exaggerate the state of things is literally impossible ; to depict it correctly, simply hopeless ; and to invite any of their fellow-citizens to witness it for themselves, uninfluenced by other motives than mere curiosity, your Committee feel would be exposing their philosophy to a most unwarrantable ordeal. And this court is within a few yards of one of the greatest thoroughfares in the city ! ”

138. *Limekiln-lane*.—In one house a privy and ash-pit are under the stairs. The front of this house is on a much higher level than the back. There is no water. Fever and cholera were present here.

139. I take this opportunity of pointing out the evil effects upon health of a nuisance of this description, and of again insisting upon the small hope that there is, that those whose duty it is to make better arrangements, will do so unless compelled. With reference to the following statement by Mr. W. Smith, I have to add that the privy and the ash-pit are still in the same offensive position :—

“ Amongst other nuisances, we particularly noticed the condition of a dwelling in Limekiln-lane, one door removed from the corner of Partition-street. We found the closet situated just inside the street door, in a recess, under the staircase. It was choked and overflowing, the effects being as offensive as can be imagined. Under these circumstances, attempts were made, from time to time, with an iron rod, to give exit to the contents, which succeeded by forcing a portion into the house underneath, in Webber’s-buildings (likewise duly reported), which has from this cause been rendered uninhabitable. This closet, or rather open tank, is placed close to the only sitting-room of the family, and the partition being partially broken down, the effluvia must pervade the apartment, and, in fact, the whole house.

“ A notice, representing the deplorable state of these premises, drawn on one of Schedule A forms, (as directed in the ‘ Prevention of Nuisances’ Act,) and signed by Mr. J. H. Wyld and myself, was served, with other notices, at St. Peter’s Hospital, just before Christmas, 1848. The premises being in precisely a similar condition a month subsequently, I waited on Mr. Downing, who then promised that something should be done.

“ Towards the end of February (I speak here from memory merely), one of the children of Broad fell ill with a severe attack of low fever. I saw him, and, certainly, his condition was precisely that of a person affected by some powerful poison—he was utterly prostrated. The Rev.

Mr. Hopper gave the parents a Dispensary note, and under the care of Mr. Martin, the lad, contrary to my expectations, recovered.

“Whilst visiting the boy, I found the nuisance precisely as before. Under these circumstances, I wrote to Mr. Downing, about the middle of March, and received an answer to the effect that Mr. D. had been hitherto prevented from attending to the nuisances in question, but would shortly do so. Towards the end of that month, I again visited the premises with Dr. Kay, and found the place as bad as ever.

“Since then, the proprietor of the house has called upon me, stating that Mr. Downing had been there, and had requested him to see me. On May 1st. (two days ago), I examined the premises with Dr. Green; the nuisance continues unabated, no steps having been taken to remove it. The contents of the tank empty themselves into the premises below, next door to which nine cases of fever occurred about two years ago. I have no hesitation in saying that more cases of fever will occur in that house or the neighbourhood, and obviously entail an additional expense on the rate-payers, during the ensuing summer, unless the nuisance be removed.”

This anticipation of future evil was, unfortunately, but too literally verified; this house being the first, and for some time, the only one, in which Cholera occurred; three of the inmates died from that disease. In Park-row, the *Wilderness* footpath lies between two walls, and is in a very filthy and offensive condition. In *Tankard's Close*, is a public ash-heap. The courts about here are close and ill ventilated, though in an excellent natural position. The inhabitants of Corston Villa complain of a public nuisance in the adjacent field. On *St. Michael's-hill*, complaints were made here of a smoke from a tall chimney in Lewin's Mead. Mr. W. Whereat states:—

“Whenever the wind is from the W. or S.W. most of us, and especially myself, are obliged to close doors and windows to prevent the house being filled with a thick, black smoke issuing from this chimney. Some few years since, a memorial was signed by about 24 of the parties more immediately annoyed; the deputation who presented the memorial were promised that every effort should be made by the proprietor to remove it, but nothing appears to have been done, and the health of my family is materially affected by it.”

Mr. Whereat also complains of the dust and ash from a forge recently erected in this district.

140. *Little Queen-street*, or *Christmas-steps*, are very steep. The almshouse, at the top, drains upon the lower houses. The drainage is very defective upon this hill, and the houses are crowded together. There is no water laid on. The back premises are very intricate. Between *Christmas-street* and the *Stone Bridge*, are from 60 to 70 ejects carrying house drainage into the Frome, which here receives a considerable area of house drainage, including several privies, which overhang the river. The inhabitants of *Christmas-street*, which is built over the stream, complain grievously, and

state that Mylne's Culvert is quite inadequate to remove the evil. Concerning this locality, Mr. W. Yoalten states:—

“I beg to call your attention to the state of the river Frome, and the sewerage between the Stone Bridge, at the head of the quay, and Christmas-street. There being several open drains, and about 20 mouths of gouts and two large sewers, and also the soil falling from several overhanging privies, exposed for the greater part of the year, and particularly in the summer months, sending forth a most deadly stench. The river, at this part, being about double the width of what it is above Christmas-street, or at its outlet; in fact, in the summer, it is a cess-pool.”

This lower, and smaller part of St. Michael's, bordering on the Frome, is densely peopled, crowded, damp, and suffers from exhalations from the river.

141. At the corner of *St. John's Bridge*, is Mrs. Patrick's house. The wall is only half-brick thick, and a hole has been knocked through it by a passing cart. She occupies one room. It has no back windows. Under *St. John's Arch*, at the bottom of Broad-street, is a very offensive public urinary, made about 12 or 18 months ago. It is a considerable nuisance, and in a very filthy condition.

142. The central parishes of the old city were inspected on the 27th instant, in company with the Town Clerk, Dr. Kay, the Rev. A. C. Rowley, curate of the Weir, Mr. S. Goldney, Mr. Armstrong, Mr. J. J. Birtill, and police inspectors Bell and Webb.

143. In the old city parishes of ALL SAINTS, CHRISTCHURCH, ST. EWIN, ST. JAMES, ST. JOHN, ST. LEONARD, ST. MARY-LE-PORT, ST. NICHOLAS, ST. PAUL, ST. PETER, and ST. WERBERGH, 813 houses contained in 143 courts; 125 courts are closed at one end; in 55, there is no scavenging, and only 11 take water from the Company. As to streets (Appendix G.), out of 272, there are 16 scavenged thrice, 223 twice, weekly, and 34 totally neglected. Out of 4,188 houses, 429 are supplied by the Water Company; in 264, nuisances are complained of; and 260 are without back windows.

144. In Castle Precincts, and St. Philip and Jacob (Within), (Appendix I. and J.), 58 courts out of 60 have no thoroughfare, 4 have surfaces unmade, 52 are scavenged twice a-week, 4 have the ashes removed, and 4 are totally neglected. Out of 387 houses, 3 are supplied by the Water Company. There are 25 streets, of which 2 are scavenged thrice, 21 twice, and 2 once a-week; 91 houses out of 631 take the Company's water, and in 39, there are complaints of nuisances; 63 have no back windows.

145. Messrs. H. J. J. Hinton and Son, directed my attention to the following nuisance in Small-street, in which are their offices:—

“There is a filthy lane, called Leonard's-lane, near the bottom of Small-street, and which leads round into Corn-street. The state of it, in a general way, is so bad as to be quite sufficient to produce pesti-

lence, although we have observed that, since you have been staying in Bristol, more attention has been paid to sweeping and cleansing it. In addition to the nuisances committed by human beings, there are stables, which are kept in such a filthy state at times, as almost to prevent our clerks sitting in their offices."

Cider House-passage.—A close court, with a public urinary, and a very offensive privy; drainage bad, smell in this court peculiarly offensive, and much complained of. Near this, is another burial-ground belonging to Christchurch, also very full and surrounded by houses. *Wellington-street*, back of *Tower-lane*.—There is a step in the ground here; the houses are built close, back to back, and exceedingly crowded along the line of the old city wall. Mr. W. Jones complains of—

"The iron grating at the bottom of *Tower-hill* and *Jacob-street*; the stench from thence, in the summer, and now, in the evening, is abominable, rising up two yards from the surface of the grating. It proceeds from Messrs. Cox and Shaw's soap manufactory."

The Pithay, is steep, very crowded, and chiefly occupied by old clothes' shops; it is a footway only. Mr. Bowden called my attention "to *Fox's-court*, situated at the bottom of the *Pithay*, as one of the most densely-populated courts in this city, and in the most filthy state."

146. The houses above the junction of the two streams of the *Frome* are very crowded and lofty, and built on the edge of the river. They are deficient in back premises, and the lanes behind them are very intricate; and although the ground is very steep, the house and alley drainage is defective. *Ellsbridge-passage* is connected with a narrow and dirty lane. With reference to this district of the city, the Rev. A. C. Rowley observes:—

"I beg to call your attention to the state of that part of the *River Frome* running along the *Rope-walk*, in the 'district of the *Weir*.' During the winter and spring, the repeated flushes of water prevent the accumulations of the filth and sewage which is discharged into the river; but during the summer, the bed of the stream becomes for the most part dried up, and then the stench arising from it is most injurious. I would also draw your attention to a passage, called *Ellsbridge-passage*, which leads from the west end of the *Rope-walk*, across a narrow bridge, into *Ellbroad-street*. This passage is a pretty general, though a very inconvenient, thoroughfare; and I believe it was contemplated by the Corporation, at one time, to throw it more open by the removal of some of the crowded buildings thereabout. I should regard such an alteration as greatly conducive to the health and morality of that locality. In the summer, the most offensive effluvia find a channel through this passage from the *Frome* into *Ellbroad-street*; and a respectable shopkeeper, living at the top of the passage in *Ellbroad-street*, told me, that often the stench coming down the passage from the river was unbearable; indeed, at this very house, two children died of cholera during its late prevalence. I may add, that the houses, at that end of the passage nearest the river, are of the worst description, and harbour some of the most aban-

doned characters. The narrowness and darkness of this place afford a ready means of escape by night to the thieves and vagabonds who frequent the Rope-walk. It was but a day or two since that a little boy was decoyed by a man into this place, and forcibly stripped of his jacket; and I am assured that the language and behaviour to be witnessed here, especially on the Sabbath day, are of the most offensive kind."

147. *Redcross-street* is open and airy, and contains several very good houses. Next to the Tabernacle Burial-ground, are three courts leading out of *Redcross-street*, in which cholera, at its recent visitation of the city, first broke out, and which, therefore, from this circumstance, and the peculiarly fatal character it here assumed, closely connected, it would seem, with the local features of these courts, merit a somewhat more detailed notice. *Gloucester-court*, *Wellington-buildings*, and *Wellington-court* form a large block of long, narrow lines of houses, lying parallel with each other, and having separate entrances from the adjoining street; the first by a covered archway, and the two latter by open approaches, and a communication common to both. It would be incorrect to say that there were no drains (so called) in these courts, and it would be equally at variance with truth to say that they answered any purpose of drains in carrying off the refuse matter from the houses; at the inner and farther extremity of the courts they were closed, and the fall, instead of being towards the other extremity, opening into the main sewer in *Redcross-street*, was found, on the contrary, to favour the flow of sewage upon the courts. The effect of this faulty construction was necessarily to occasion a large accumulation of privy and house refuse, amounting to several loads; in fact, to create extended local cesspools of the worst and most obnoxious character.

148. Under these circumstances, it cannot be matter of surprise that cholera raged in these courts with terrific virulence—that, within a few days, 44 persons fell victims—and that it was not till the most energetic measures were adopted, and a complete purification and white-liming effected, that its ravages were stayed. Of these 44 deaths, 20 occurred in *Gloucester-court*, 14 in *Wellington-buildings*, and 10 in *Wellington-court*; and to this fatal catalogue must be added yet another death, that of the man, viz., employed in cleaning out the drains, who, it was stated, died from the effects of the noxious effluvia to which he was thus exposed.*

* The sequel is scarcely less striking and instructive. While these sheets were passing through the press, this locality was visited by two gentlemen, members of the "Health of Towns' Committee" of the Town Council (whose names have appeared more than once in this Report), who found upon inquiry that, though the pavements at the suggestion of Mr. Goldney, the medical officer, had been newly laid down, and fresh drains constructed with a proper fall, some of the privies were again becoming choked, and all complained of as very offensive; that there was "not a drop of water" upon the premises fit to drink; that supplied by the only pump being wholly unsuitable, from its tainted nature, for domestic purposes; and that scavenging, which

This is an example of houses built 40 years ago on speculation, and all let out to weekly tenants. These remarks apply also to a series of courts opening out of a narrow part of Redcross-street. The practice here is to throw the ashes out into the streets. This evil is much complained of; the want of water is universal. Mr. Monk complains of exudations from a neighbouring privy, especially in the summer. *Hurley's-court* is a very narrow alley, and in one room is a privy, next to the fire-place, choked for the last six months, and affecting the soft water pump. *Guard-House-passage* is in a filthy state with ordure. It is paved, and a thoroughfare, but said not to be public, and, therefore, not cleansed. Messrs. T. W. Tilly and W. Jones state concerning it,—

“We, as occupiers of the premises Nos. 56 and 57, beg to call your attention to a passage, the entrance to which is between the premises occupied by us; it is disgusting each morning to behold. Its present state must have a serious effect upon the health of the neighbourhood.”

149. Near St. Nicholas church, is *Gun-yard*, which has no back ventilation or house drainage. A large gutter grate is complained of. The cholera was severe here; there were seven fatal cases. In one entry, are two pumps, three feet from a privy; the well is said to be at a somewhat greater distance. Great complaints of want of water; the people say that the landlords refuse to lay it on. Mr. Armstrong states that it is impossible to make the drainage work without a better water supply. *Red lane, Rackhay*.—A pump and rain-water tank are placed against the wall of the churchyard. At the back of the burial-ground, known as the *Rackhay*, is another narrow court, in a miserable condition, but swept clean; it is said to be about to be pulled down. The condition of the greater part of this immediate district, though from its position, crowded population, and want of water, it is very unhealthy, is yet kept as clean as circumstances admit of, partly from the notoriety which the place acquired during the cholera, but more especially from the constant supervision of Mr. Price, the parish clerk of St. Nicholas. At the back of the houses in this court, is a sewer, and the ground is elevated above the floors.

150. The Rev. Mr. Barrow states with reference to this district :—

“The Committee to which I have alluded, and of which I was the chairman, was formed in the month of October 1848, for the purpose of taking measures to improve the sanitary condition of the parishes of St. Nicholas and St. Leonard. As in this district the cholera, in the following year, was very fatal, I may perhaps be permitted to give you an extract from the proceedings of the Committee, recorded in their Minute

should be performed once a week, was by no means regularly attended to. In fact, that these courts, notwithstanding the fearful warning so recently conveyed, were fast relapsing into the same neglected condition in which they were at the time of the cholera—striking evidence, this, of the indispensable necessity for constant and efficient sanitary supervision.

Book, and to offer a few observations on the sanitary condition of that quarter of the city.

“ This district is situated in the lowest part of Bristol, on the banks of what was once the river Avon, but is now a portion of the floating harbour. It is miserably drained, and, I fear, that the money spent on an attempt to improve the drainage, in the years 1848 and 1849, was laid out to little advantage.

“ The water and liquid filth still occasionally lie for a long time at some of the openings into the sewers, giving one reason to anticipate that a scientific survey will prove that some mistake has been committed either as to the levels, or the mode of construction adopted; the Committee met on the 9th of October 1848, and after having visited the very locality in which the cholera broke out in the following summer, they recorded the result of their inspection:—

“ ‘ *The Gunyard and Coronation-place*; a court in Back-street. The pitching is very much out of repair, causing the refuse water and filth to lodge in the centre of the court. One privy, one pump, one sink, common to eight houses, containing, at least, from 50 to 60 inhabitants. The Gunyard, containing two houses, in a most filthy and offensive state; the stench arising from the privy most intolerable.’

“ ‘ *Red-lane*, a court in Back-street. This court is in a filthy condition; the gout choked, and dirty water flooding the pavement. This court forms one side of a square, the Rackhay forming the other three sides, in the centre of which is enclosed one of the parochial burial-grounds. The earth in the burial-ground is raised several feet above the surface of these courts.’

“ ‘ *The Rackhay*; this court is in a most wretched state: the houses ill-built, insufficiently lighted, imperfectly ventilated, and badly drained. The land water, in two cellars, was of considerable depth, with no other means of getting rid of it excepting by dipping it out. Dirty water and vegetable refuse lying about the court indicated that the work of the scavenger was greatly neglected.’

“ Representations were made, and notices served, respecting these nuisances, and every effort was tried by the Committee to remove them. Pumps were put in order, privies cleansed, and houses whitewashed; but the evils of bad drainage still remained. During the whole of the spring of 1849, the sewers in St. Nicholas’ parish were impeded and more than ordinarily offensive on account of the works which were being carried on by the Commissioners for the Improvement of the Drainage. At a meeting of the Committee on June 23, 1849, the Vicar reported, ‘ that the works of the Commissioners were still incomplete, and that the nuisances of gouts, &c., in Coronation-place, Red-lane, and the Rackhay had not been remedied.’ On the same day, it was reported ‘ that three cases of cholera had occurred in the parish, two of which had proved fatal.’ From this time the disease increased until, on the 13th of July, I had occasion to write:—

“ ‘ Those who have been visiting this district with a view to the removal of nuisances, during the last six months, have directed their attention especially to the state of the sewers. The situation is very low; insomuch that there is not sufficient fall to flush the drains. There are in Coronation-place, Red-lane, and the Rackhay, three very large openings into the gouts, which are frequently flooded with filth of the most

offensive kind. In the midst of these are situate the houses, in which the disease, having entered the parish from the floating harbour, formed its *nidus*. The first two cases were those of two sailors lodging at a sailors' boarding-house in the Welsh Back.' * * *

"The first case attacked, in the neighbourhood of the Rackhay, was that of a poor old man in the Gunyard, who, on Tuesday July 3rd, sat, from 4 o'clock in the morning until 6 o'clock in the evening, making baskets, in the open court, within twenty yards of two of these offensive openings; he died, having been attended by his children and the sisters of his son's wife; by these children the disease was carried into the Rackhay, and no less than *thirteen* persons of these two households have been attacked. The second case was that of a negro, who had recently come from Dowlais, in South Wales; he also died in a house very near one of the openings into the sewer; and there has been another fatal case, besides one cholera patient, still under medical treatment, in the same house. But what is most remarkable is, that a house, situate exactly between two of these openings, has suffered more than any other, there having been from that house alone eleven cholera cases and five deaths.'" * * *

151. In *Marsh-street*, in St. Stephens, is *Sugar-loaf-court*, narrow, badly paved, very close; water very bad and not useable. This street has been lately much improved by the erection of warehouses. It is to be regretted, in the improvements in some of the dwelling-houses, that better attention has not been paid to elevating the floors, and to drainage. Recently, during the cholera, 64 people were ejected out of one house by the Corporation of the Poor, and the house was closed. The people here are chiefly low Irish. The cholera was severe.

152. The parishes of ST. THOMAS REDCLIFFE, and TEMPLE.—All these parts of the old city were inspected on the 26th instant. I was accompanied by the Town Clerk and Dr. Kay; by the Rev. G. Campbell, curate of Redcliffe, and the Rev. J. J. Ebsworth, curate of Temple; Mr. Scrase and Mr. House, churchwardens of Temple; Mr. Perkins and Mr. Gibbs, churchwardens of Redcliffe; Aldermen Wyld and Lucas; Mr. W. Poole King, Mr. Jackson, Mr. G. Goldney, and Mr. E. Thomas, all connected with the district; Mr. A. Smith, Mr. W. K. Sheppard, Mr. Green, and Mr. S. S. Goldney, surgeons; Mr. Horwood, clerk of Redcliffe; Mr. Davis, sexton of Temple; Mr. Halsall, Mr. Cripps, Mr. J. Armstrong, and Mr. Birtell; also Mr. Bosworth, Mr. Ball, and Mr. Webb, Inspectors of Police. These parishes occupy a loop of the ancient Avon or present Float, converted into an island by the New Cut. The central parts are high; those towards the Float, from Redcliffe wharf to the railway goods station, are very low, and the soil is marshy and undrained. The sewerage is undergoing great alterations, but is at present in an imperfect state, and much complained of.

153. It appears by the police returns for these three parishes, (Appendix M and N) that out of 132 courts, 94 are closed at one end; 10 have no made surface; 7 are scavenged thrice, 56 twice

a-week ; from 59, the ashes only are removed, and 9 are totally neglected ; 90 are supplied with the Company's water ; and out of 960 houses, 453 suffer from nuisances. With reference to streets, out of 59, there are 43 scavenged thrice, 10 twice a-week, and 6 totally neglected. Out of 1,189 houses, 261 take the Company's water, and 336 suffer from nuisances. Temple contains 6,189 persons, St. Thomas 1403, and Redcliffe 7,025.

154. The following notes were taken during the inspection :—

In *Redcliffe-street*, is *Queen's Head-court*, very long and narrow. The walls of several of the houses are damp from the higher ground behind. The cholera was present here. The floors are a little below the ground level. There is a *slaughter-house* in this court. Other houses are very low and damp, and there are general complaints of smells, damp, and of refuse matter lying about the gutter-grate. Opposite, on the edge of the Float, at the back of a butcher's shop, is a large *slaughter-house* in a very objectionable place, with a pigstye, stable, and manure heap, all under cover. In this neighbourhood, the cellars require to be pumped out occasionally. The entrances of the alleys show sufficiently the great want of house accommodations. *Redcliffe Back* is ill-paved, and contains in the street large open bins for grains. The following complaints relate to this place—

“ We, the undersigned, beg to call your attention to a *slaughter-house* on Redcliffe Back, which is a very great nuisance to the neighbourhood.

“ When the cholera was in this city, last year, in the dwelling-house next to it, occurred one of the worst cases of that disease ; yet, notwithstanding this warning, the cause is not removed.

“ Trusting that this application to you will result in its removal,

“ We are yours respectfully,

“ CHARLES CARPENTER, Redcliffe Back.
RICHARD CRIPPS, Redcliffe Wharf.
WILLIAM TOWNLEY,
JOSEPH DART,
EDWARD DECOCKS, } Redcliffe Back.”

Another statement adds—

“February 25, 1850.

“ I beg leave to call your attention to an open dungheap, situated close to the pavement on Redcliff Back ; this morning, the dung was removed, and I assure you, at all times the steam and stench arising from it is overpowering, more especially in the summer ; and from an adjoining factory, twice or three times a-week, particularly on Saturday, a quantity of ashes and refuse vegetable matter is thrown out on the pavement, to the great annoyance of foot-passengers and others, a considerable number of whom are constantly passing from the railway terminus across the ferry to the commercial part of the city.”

155. In *Golden Lion-court* are great complaints of the quality of the water, which is only used for washing. The people get water from the Neptune Conduit, which fails in summer, when they pass

three-farthings for a jar full. A very long narrow passage leads through to Redcliffe-street. *Ferry-lane* is narrow, close, and partially covered, but the surface is clean. The floors of the houses are below the ground-level. In one house, with very insufficient ventilation, a school is kept. There are no back windows. This was particularly pointed out. As many as 18 children have been observed present here in a very small room. In Redcliffe-street, advantage had been taken of a fire to set back a house: one of the numerous improvements effected by the Corporation. *Warry's-court* is very long and narrow, but partly open. At the end of this court, are two privies, over a considerable ditch; the arch covering which is imperfect, and is said to emit very offensive odours, the hot water from a steam-engine being turned into it. The people here purchase water at a half-penny per pitcher, the pump-water being very bad. The interior of these houses is, for the most part, clean. The ditch referred to, is called the *Law-ditch*; it forms the boundary of the parish. Mr. George Thomas, who has a large sugar warehouse on the spot, called my attention to this ditch, which runs between Thomas and Redcliffe-Streets, and which is known to very few people: being quite out of public observation, it may be seen by going up some of the courts in Redcliffe-street, which of themselves deserve notice from their closeness and filth.

156. In *Three Queens'-lane*, is a *slaughter-house*, the owner of which declined showing it, and had apparently good reason for so doing. The cattle are brought in through the alley. *Jones'-place* is very confined indeed, but very clean. Universal complaints of want of water. *Nelson's-place* contains cellar-dwellings, and above their level, are small gardens with filthy privies in them, and close to the houses. Quantities of ashes, rubbish, broken pots, &c., are thrown out. In the alley, are collections of ordure. The people are very badly off for water, and the drainage is very deficient indeed. These houses afford a remarkable instance of how completely a fine airy situation may be ruined for want of ordinary attention. On the opposite side, are the houses in which the cholera raged; here they are even worse off, inasmuch as they have no back premises whatever, and the privy is in the inhabited cellar; the people themselves deserve some credit for the cleanliness of the interior of their houses amidst so much exterior filth. This place gained a fearful notoriety during the cholera; the particulars of its ravages are set forth in another part of this Report. *Providence-place* contains a remarkably neat, clean, and open space; the gardens however are dirty, and it is the custom to bury the privy soil in them. *Tennis-court* is a very long, narrow court, with very narrow back premises, ill-paved, damp, and badly drained. The privies are close to the houses, and the water supply is defective. In *Redcliffe-square*, the privies were recently in bad order, and the water is tainted. A number of small gardens

are in a dirty condition. The want of water, and of house drainage, were complained of; here a mason pointed out the gross defects of the present house drainage. *Orchard-square* is much in the same state, with similar complaints of drainage. There is a heap of filth on one side of the pump, and of ashes, &c., on the other. At the top of *Ship-lane*, extremely dirty, is *Somerset-square*, in a totally opposite condition. Here the proprietor has enclosed a spacious grass-plot, with shrubs and a handsome fountain in the middle of the square, which is paved all round, and the work of improvement is proceeding at present. This is an extremely airy situation, and contrasts very remarkably with all other parts of this quarter of the city.

157. Mr. J. Ayre, by whom all this has been done, has met with but little encouragement from the authorities to persevere for the water, from a part of *Ship-lane*, oozes through the wall, and is complained of as producing, in summer, very offensive smells. The lane is not lighted, and is usually a mere receptacle for ashes.

Mr. Ayre states—

“I have spent about 400*l.* in *Somerset-square* for the purposes of improvement, and I would readily contribute to any fund for the purpose of widening *Ship-lane* throughout.”

Opposite to *Temple church*, in a narrow, crowded place, is a *slaughter-house*, with stabling, and a large manure heap. The whole is badly paved, and in a most filthy state, with hot, offensive vapours arising from the dungheap, &c. *Sims's Lodging-house* is crowded, and up a narrow court. Behind, up another alley, are some premises containing five cows, a horse, and a very large heap of manure. Near this, *Stokes' lodgings* are in the same crowded and filthy condition. Persons sleep over a privy and stable. In the court, are open manure heaps. These sleeping-rooms have many holes in the floors. Two of the rooms contain 10 beds; and in the farthest corner of the inner room is a privy. The whole of the upper rooms are ruinous. *Temple Backs* is a low street, containing inferior houses, and deficient in water supply and drainage. In *Pipe-lane*, is a row of houses called *Ring's Buildings*, of which the backs are one story lower than the fronts, and each story is inhabited: this was the seat of cholera. It is badly drained, very damp, and very deficient in good water. The back premises are narrow, and the privies are near the houses. An ancient sewer runs immediately under four of the houses, and appears amply to account for the appearance of cholera both in 1832 and 1849. Upwards of 30 deaths occurred at the latter period; six children died in one family. In *Rose-street*, is *Pump-court*, close, narrow, very low, damp, and undrained. No water. This appears to be from defective house drainage, since the *main* drainage is good. *Rose-alley* is another of these filthy courts, and, like the former, very deficient in privy accommodation. *Wilmot's-court*.—Possessing, in a marked degree, all the evil

already noticed. Sickness always prevalent here. There is only one privy to 16 houses. Cholera. The condition of many of these interiors baffles description. In *Prewett's-street* is *Prewett's-place*.—Narrow, low, but paved, and at present very clean. At the head of the court, is an unpaved space used as a receptacle for ashes. Great complaints of want of water and want of drainage. No backlets, and but little ventilation. *Poole's-yards*.—Bone-works complained of; manure heaps, pigsties; unpaved. Good and airy position; symptoms of *very recent* improvement; large piggery. *Poplar-square*.—Low and filthy, with a number of ill-kept gardens; bad drainage, and defective supply of water. Court never taken to by the Commissioners, who do not seem to have pushed their powers in this respect. In this court, each family pays *1d.* a-week for the removal of the refuse. *Pile-street* contains a great number of courts of a very wretched description. At one end of this street, near the church, recent improvements have been effected by the Corporation. These courts have a dirty and neglected appearance, are badly drained, and are deficient in water. Much has been effected here by the exertions of Mr. William Poole King.

158. *Taylor's-court*.—In a covered entrance, under a bed-room, is a most filthy public privy. The people take the Company's water. *Hillier's-court*.—Pump sink choked, and, therefore, used as a cesspool; no water. The landlords refuse to lay on the Company's water. The whole condition of the courts in this street is infamous, and although very much has been done by *visitors* in the removal of rubbish heaps, &c., the landlords do not appear to have effected any permanent improvement whatever with some few exceptions. Near this court is a public slaughter-house, and at the time of my visit, the open yard was covered with filth and garbage. *Portwall-lane*.—Beyond the blacksmith's shop, is a most filthy space filled with manure, offal, and other nuisances; pigs kept close to the back outlet of the shop. *Thomas-street*.—Gilliard's-cottages; a small court, and particularly clean and neat, and in a state very creditable to both landlord and tenants.

159. The following extract from the Local Sanitary Reports of the "Association," in 1848, compared with the above account, will show how little has been done, notwithstanding the cholera, for the permanent improvement of these courts:—

"No. 1. — *Court*.—Ashes and refuse in the narrow lane leading from the main street into the court, which is quite open in the front, there being no buildings to intercept air and light. Smells, nevertheless, most offensive, especially at the entrance, from the disgusting state of the conveniences—dirt and refuse lying about the gouts; pump-trough used as a deposit for filth; water described as 'pretty good for washing, &c., but not fit to drink;' for the latter purpose, purchased at 'a halfpenny or a penny a jar, according to the size;' 'very short of water in the summer.' There was another pump, about seven or eight

years ago, which was stolen, and has never been replaced. A woman, in answer to our inquiries, stated that she had only lived in the court three weeks, and she 'is sure she cannot bide much longer.'

"No. 2. —'s *Buildings*.—Open space in front, with small gardens; pavement broken, and pools of wet, left by the rain of last night; commissioners talked of repairing it, if the landlord would join in half the expense, but he pleaded poverty, and there is no prospect of its being done. There is a public lamp, but no number upon it; the nearest lamp, in the adjoining street, is numbered 1372; conveniences, in the most abominable condition, which were much complained of by the better class of the occupants of the buildings; 'water available only for boiling vegetables; cannot make tea with it; very short of water in the summer months.'

"No. 3. —'s *Court*.—This is a small, confined court, to which the preceding description would, in a great measure, apply; floors of the houses very damp; pump without a handle; *have had no water* for more than three years; a fatal case of cholera occurred in this court in 1832.

"No. 4. — *Place*.—Refuse, &c., lying about as usual; a gout runs under one house, which is, in consequence, not tenatable; there is, in fact, a communication with the interior through a hole in the stone floor, from which the most offensive effluvia escaped. All the houses suffer in a similar manner, from the defective state of the drains; and, when the small size of the dwellings is kept in view (one room we entered being only 11 or 12 feet by 9 feet, and 7 feet in height, inhabited by six persons), the nuisance may well be considered intolerable. Dwellings generally very damp, as the walls too palpably betrayed; one house too damp for occupation—'no one can remain in it.' There is a pump, but the water is only used for cleaning purposes; the gout, it was stated, broke into the well about two years ago; the water was previously good. The occupants, it appears, upon inquiry, whitewashed their own dwellings.

"No. 5. —'s *Yard*.—*Pump of soft water*; offensive refuse constantly deposited in one confined corner, immediately over which is a small bedroom. At the other extremity of the yard, was a large pool of filthy stagnant fluid, of the most offensive character, though the gout (as usual choked) is close at hand.

"No. 6. —'s *Court*.—Houses in a most dilapidated condition; outer walls bulging, and apparently only kept from falling by props of timber; a wretched place, indeed; several houses untenanted for years; the site of one ruinous dwelling used to deposit ashes and vegetable refuse, of which there was a large accumulation; other arrangements filthy to a degree; gout choked, which frequently happens; no water fit for drinking. Several cases of cholera occurred in this court."

160. ST. PHILIP AND JACOB (Out) is the most populous parish in the city (population 21,590), and contains the largest proportion of poor. There are 60·8 per cent. of houses rated at or under 5*l.*, and 89·6 per cent. at or under 10*l.* At the last census, there were on an average 5·7 persons to each house; a number which involves a good deal of crowding in the poorest quarters.

161. The police returns for St. Philip and Jacob (Out) (Ap-

pendix I and J), show, as regards courts, that out of 138, there are 130 closed at one end; 27 have no made surface. In 54, the scavenging is totally neglected; 10 only are supplied by the Water Company, and out of 732 houses, the inhabitants of 64 suffer from nuisances. With respect to streets, it appears that out of 121, 5 are scavenged twice, and 30 once weekly, and 86 are never scavenged at all; but of 3,664 houses, besides manufactories, 156 only are supplied by the Water Company; in 477, nuisances are complained of, and in 528, there are no back windows.

162. The inspection of this parish took place on the 15th and 20th. I was accompanied by the Town Clerk and Dr. Kay; the Rev. Mr. Clark, curate of Trinity; Mr. Slade, Chairman of the Board of Highways; Mr. Green, Surgeon; Mr. C. Thomas; Mr. Armstrong; Mr. White, Superintendent of the Frome; Mr. Chick, Collector of Local Taxes; Mr. Dykes, Superintendent of the Bristol and Birmingham Railway; Police Inspectors, Bosworth and Webb; and several others, parishioners.

163. The following are the notes taken on the spot:—

In *West-street*, the road is bad, with heaps of filth at the side. These are much complained of, being a mixture of house filth and scrapings. *Bull-Paunch-lane* is a street of slaughter-houses. In some cases, the slaughter-house is in front, the dwelling-house behind, and behind this, a narrow, close yard, with pigstye and privy. The house-drains pass under the houses into the street sewer. There is no water, and the people would willingly pay 2*d.* a-week for it. The rent of the houses is 8*l.* a-year; one house is used as a public ash depôt. Near, is *St. Jude's*, a new and handsome church, in which service is performed twice daily. It stands on the site of the "Bull Ring." The roads in the neighbourhood are unmade, and in a very filthy state. Close, east of the church, is a *public manure depôt*, and a most offensive *knacker's-yard* adjoining a dwelling-house. Cholera occurred in the neighbourhood. There is no sewer in the next street. *Bragg's-lane* is very badly pitched; some of the adjacent streets are fairly pitched. *Fudge's-court* is low and damp. The house floors are lower than the ground. There is no water. *Matthews's Knacker's Yard* contains a pigstye, manure heap, tub of offal, and a stable, and is badly paved; all in a densely populated neighbourhood. It appears from a return by Mr. Eagles, on the part of the "Society for the Prevention of Cruelty to Animals," that into three knackers' yards, in this immediate neighbourhood, between January 1, 1849, and January 1, 1850, there were brought 415 horses, 41 asses, and 3 heifers, being 459 carcasses; an average of above 1·2 a-day; a continual supply of what, under any circumstances, must be putrid, and, in this case, is usually most offensively so. A greater nuisance to a crowded neighbourhood than a knacker's shop can scarcely be found.

Dark-entry is very close and crowded. Heaps of ashes and offal are thrown into the passage, of which one end is nearly blocked up by such deposits. The scavenger comes here about once in six weeks, and sometimes at a much longer interval. In *Mill's Lodging-house* are 12 beds. Here they take the Company's water. The service-pipe and cock cost 32s., and 12s. a-year is paid for the water. It is laid on each day, but when used for washing requires the addition of soda. The rent of the house is 11 guineas. In Lamb-street, is a *Grease Refinery*, with a depôt for stable manure and a tub for ashes. The smell from hence is very offensive, and is much complained of. This is a most objectionable manufactory for such a neighbourhood. In the same street, is another *Grease Refinery*, with three pigsties and a very large and filthy manure depôt. The yard is unpaved, and is wet and dirty. There is an open gutter. The owner takes the Company's water, and pays 16s. a-year.

164. *Barnes'-court* is damp and unpaved; here is a stable under a dwelling-house, a common privy in the yard, and another privy in the stable. *River-street*.—This is a broad space, on the bank of the Frome, here flowing between retaining walls. In this space, is a tan-yard, and a heap of tan refuse thrown out into the public way, in which also the fleshing process is carried on. The broad space extends as high as Traitor's-bridge, and is kept clean, with the exception of the tan-pits, and a public ash place at the bridge. In *Ann-street*, *Pratten's-court* is badly pitched and very wet. Here are two public privies under dwelling-houses. In *Little Ann-street*, are two *catgut manufactories* on a very small scale, but emitting a dreadful stench. The back premises here are in a state of dirt and mud. There are pigsties in the adjacent premises. *Pennywell-road* is badly made, and kept in a filthy state; the following memorial relates to a very serious state of things in its immediate neighbourhood.

“ We, the undersigned householders and residents in Pennywell-road, (otherwise Pennywell-lane), in the out parish of St. Philip and Jacob, beg to submit the following to your notice.

“ That the River Frome, which is a short distance on the north side of said road, is, at certain periods, but more particularly in the summer season, nearly devoid of current, the bottom being of very unequal depth from the occasional washing away of the banks, walls, &c.

“ That, in addition to the drains from the neighbouring buildings, there are two large, *open*, public drains discharging into the river; one from the north side, nearly opposite Earl's mead-house, another from the east-south-east, nearly opposite Mr. Puddy's premises; the discharge from the latter, has of late years much increased.

“ That, within a few years past, tanning, or skinner's yards, have been brought into vigorous operation, at the east end of the road, from which offal, and other matters in a highly putrid state, are often discharged in large quantities into the river.

“ That some of the said discharges of putrid matters occur at a time when the Meads, viz., those between Baptist-mills and Wade-street-bridge, are covered with water, by the down freshes; that upon the water receding, a considerable deposit of decomposing animal matter takes place thereon; and as these overflowings are much more frequent since the building of the new bridge at the east end of the road, than formerly, it is now found that the exhalations from this source, the drying of skins in the yards, and the stagnant nature of the water in the river, at certain periods, produce very powerful and noxious smells, which are not only injurious to the health of persons living in the neighbourhood, but being blown by the very prevailing east, south-east, and north-east winds towards the city, may fairly be considered as in no small degree contributing to the disease which has, on more than one occasion, so fearfully ravaged the eastern portion of Bristol.

“ Nathaniel Puddy, Pennywell-road, Plumber, &c.
 Thomas Turner, Earl’smead-house, Pennywell-road.
 Ann J. Goodwin, Pennywell-road.
 Robert Walks.
 J. M. Gardner, Pennywell-road.
 W. Brown, Pennywell-road.
 J. W. Upham, 6, Carlton-place, Pennywell-road.
 J. C. Davies, 3, Carlton-place.
 John Alfd. Whiteard, 2, Carlton-place.
 William Smith, Pennywell-road.
 John Smith, Pennywell-road.
 John Underwood.
 John Milnon.
 Theodore May, Dyer, &c., Pennywell-road.
 James Little, Pennywell-road.
 Wm. Oxenham, Pennywell-road.”

165. *Earl’s mead-terrace* is a row of neat, airy houses on a slope, with well-arranged gardens before and behind, but affected injuriously by a filthy open ditch at the back, which conveys the filth of a very large district into the Frome. Close to one end of the row, is a very large public manure depôt. In a very narrow part of Pennywell-road, are several heaps of ashes and vegetable matter, piled up at the side. The scavenging is very much neglected, and indeed, in parts, the road is far too deep to be scavenged at all. This district, between Stapleton-road and the Frome, has house-drainage, but each drain passes under the house, and is very liable to be out of order. *Baptist-street* contains an unmade road. The street is inhabited, but the road has not been “ taken to ” by the parish. The road is badly made and narrow, and there are in it heaps of manure. The cottages are low, damp, and crowded together. The drainage is deficient, although the natural fall is good. North of the church-yard of *St. Saviour’s Church*, is a very filthy, narrow lane. Near Baptist Mills, is a large *scavenging depôt* by the road side, and, a little further, another, of later date, but very offensive to passers by. *Wheel-lane* has an undrained, narrow, and very dirty road; on one side

of which is a row of remarkably neat villas, called "Minor Cottages." In one of the houses opposite, is a drain much complained of, and choked up. All the houses on this side are drained into cesspools, some of which are very offensive. The following statement, by Mr. W. James, relates to this place :—

" *Wheel-lane, Baptist Mills,*
February 11, 1850.

" I beg to call your attention to the state of the drains in Wheel-lane, Baptist Mills; there are about 40 houses in this place, and no proper drains; only cesspools, and some of them in front of the houses. In each case, the nuisances have to pass through the house, which is very offensive. These cesspools are often quite full, which we have very often complained of. I can state that, last summer, I had to empty one of these holes, which nearly proved fatal to me, as I was made ill for several weeks. Something should be done, lest the cholera return. The water is very good, but I am afraid the nuisance will find its way into the wells."

166. *Prospect-place*, above Baptist Mills, is a long row of houses standing above the Frome, and draining into it. In front of them, is a dirty bank. *The Armoury* is another example of houses built and inhabited before the road has been formed. *Stapleton-road* is in very bad order. Heaps of scrapings are piled up at the side. Opposite the "Waggon and Horses," is a heap of manure. On the same public thoroughfare, near *Lawsford's gate*, where the stream crosses the road, is a very filthy corner used for public refuse. The following document deserves attention, on account of the number and character of the signatures attached to it :—

" The undersigned respectfully call your attention to the sugar refinery of Messrs. Hier and Stock, situate in Old Market-street, the odours and smoke from whose chimney are a great nuisance to the whole neighbourhood, and must exercise a most pernicious effect on the health of its residents.

" W. Smith and Son, 37, Old Market-street.
Samuel Butler, 42, Old Market-street.
R. M. Bryant, 52, Old Market-street.
John Ayre, 56, Old Market-street.
William Henry Snow, 68, Old Market-street.
John Goodeve, 13, Old Market-street.
Timothy Bromhead, 18, Old Market-street.
Isaac White, 36, Old Market-street.
John C. Smith, 35, Old Market-street.
Chas. Jenkins, 33, Old Market-street, Surgeon.
William Bird Herapath, 32, Old Market-st., Surgeon.
James Glass, 31, Old Market-street.
James Grant, 28, Old Market-street.
John D. Swinborn, 25, Old Market-street.
Mary Harding, Old Market-street.
Jas. H. J. G. Parsons, 78, Old Market-street, Surgeon.
William Anderson, Old Market-street.

Jacob Holden, 29, Old Market-street.
 Susan Southcott, Old Market-street.
 Mary Monk, Old Market-street.
 James Daniel, Old Market-street.
 Philip Taylor, 48, Old Market.
 Samuel Mountain, 41, Old Market-street.
 John Lyddon, 47, Old Market-street.
 Robert Headford, 31, Old Market-street.
 John Hatcher, Old Market-street.
 Marther Arnold, Old Market-street.
 James Crouch, 49, Old Market-street.
 John Day, 50, Old Market-street."

167. Opposite to William's burial ground, is a large *knacker's yard*, where cows are kept. It is unpaved, and in a dirty condition. Four whole carcasses of horses, and parts of several others, were in the yard at the time of the inspection. *Behind the Lamb Inn*, is a place for drying fish; a great cause of offence. Many of the houses in this neighbourhood are very old, and in a ruinous condition. Some are very large, and were built as private dwellings by opulent citizens, but are now inhabited by families, one in each room; very crowded, and with a total absence of "house accommodations." *Niblett's-court* is a long, very narrow, close court, with a stable at the end. The sewers are imperfectly covered, the houses very ruinous, of three stories. There is a covered entry. Two lucifer match makers carry on their work here. *Shaddock's-court*, parallel to this, is in much the same condition. The drainage is very defective. *Main's-court* is narrow, ruinous, very densely peopled, unpaved, undrained, strewn with ordure.

168. The following extracts from an account of an inspection of this part of the parish, in March, 1848, by Dr. Kay, Dr. Frupp, and other gentlemen, members of the "Association," corroborate the above statements, and add several particulars, by no means beyond what I myself witnessed; so little has the fear or the presence of the cholera done for the *permanent* improvement of this district.

"No. 1. Alley, entered by a low archway, below the level of the adjoining land, is very narrow, and forms a *cul-de sac*. There are five houses opening into the alley, having no outlet behind. The first, which presents an average specimen of the rest, contains two rooms, about 6½ feet in height, inhabited by a family of seven members, husband and wife, and five children, three daughters and two sons, the eldest daughter being fifteen, and the eldest son twelve, all sleeping in the same room; a boy nine years old, insane, recently removed to the poor-house. The floor and walls disgustingly dirty, covered with cobwebs, and apparently not white-limed for years; the woman, however, stated that this had been done *twice* during the last *eight years*, the period of her occupation. The bed-room equally filthy, one half of each window broken, and rags substituted for glass; floor broken, bed linen, &c., extremely foul. *No hard water on any of the premises,*

and obtained with difficulty from a neighbouring public house, as they 'do not give it to any one but customers;' one of the women voluntarily stated, that they 'often bought beer only to get water.' No soft water except what is caught during rain. A large heap of ashes and other refuse occupying the angle formed by the front of one of the houses, and an adjoining wall.

"No. 2 Court, directly opposite, not more than three feet wide, consisting of four houses; refuse and filth of every description lying about; open gout, choked; tenanted pig-sties at the extremity; high wall in front, dividing the court from a knacker's yard; only a *single room* to each family. In one, husband and wife and two daughters, 24 and 15 years of age; in another, the mother a widow, one son, grown up, a daughter 13, and two children afflicted with scald head. A very narrow passage leads into No. 3. Court, a long, dark, confined court, strewn with filth and refuse; at the upper end, a stable and large heap of manure. Five houses, all dirty and comfortless in the extreme, with scarcely sufficient light to allow of our groping our way into the interior of the dwellings.

"No. 4. Court, paved, but pavement broken, pools of dirty water, drain broken, and gout choked, heaps of ashes, filth and night-soil lying about; pig-sties at the upper end of the court, exhaling offensive odours, rendered still more so by the smell of sour grains, &c.

"No. 5. Court. The landlady herself volunteered to show us the interior of one wretched dwelling, remarking, in reply to your reporters' explanation of the object of their visit, that the whole buildings were 'in a ruinous state,' and ought to be pulled down, as they were not fit for human habitations; and the miserable room into which we were admitted, fully justified her observation.

"Dirt, and the usual adjunct of cobwebs, undisturbed for years, betrayed the utter recklessness to which long familiarity with such accompaniments necessarily produces. The occupant, a woman, did not think the ceiling would '*stand a whitewash*, as pieces fell down in brushing off the cobwebs.' This might possibly account for all attempts of the kind having, for a very long period, been obviously abandoned: rain constantly finds its way through the ceiling, the room being altogether out of repair. *Can 'barely get water, not having money to pay for beer.'* Only two rooms of the house, occupied by the landlady, were tenantable; the rest 'tumbling in.' 'Not one pennyworth of lime used upon the premises for *twenty-three years.*'

"Several other courts, &c., were visited, which presented similar details. A pump, or other means of obtaining water, rare; and even, when existing, frequently out of order. This was the case with a whole street, and your Committee might add, with few exceptions, the district generally—the *public house* being necessarily resorted to for the purpose of obtaining a scanty supply. *The scavengers' labours apparently do not extend to the courts*; ashes and filth are consequently accumulated in their confined localities, adding considerably to the other grievances under which the inmates suffer.

"The indiscriminate mingling of the members of a family in one common sleeping room, and, in many cases, as occupants of the same bed, without regard to age or sex, and what equally prevails, the promiscuous herding together of men and women, the married and the

single, in public lodging-houses, presents a state of things disgraceful to a Christian country. How utterly subversive of every feeling of decency or self-respect, it were idle to point out. Your Committee received evidence of the most unquestionable kind, in the course of their investigations, that results have followed too shocking to contemplate, and wholly unfit for publication."

169. The following notes relate more particularly to the division of the parish south of the Stapleton-road. Nearly opposite to Trinity church, is the entrance to the *Rope-walk*, a sort of yard, in a most filthy condition, being used as a scavenger's depôt. Behind this, are *Back-lane* and *Dead Horse-lane*, parts of a series of dirty, unpaved public passages, passing between gardens highly manured, and in a very offensive condition. *Kenilworth-terrace* is composed of new houses, on a natural eminence, but draining into cesspools, and without any other drainage. Mr. William Banks, a resident rate-payer here, states:—

"The drains in Kenilworth-place are in a most filthy state, so bad that we cannot make use of the water. Your attention to them will oblige."

Wilkins's Cottages, lower down the hill, are equally deficient, and also in a good position. They have no back windows. Below these, is the Vain or Cuckold's-brook, with extensive market-gardens along its course. Near *Waterloo House* is a piggery, and a cesspool emptied by means of a pump. *Clarence-place* is unscavenged, and the ashes and refuse are thrown into a lane at one end. *Clarence-road*, on a branch of the Bath-road, has a large offensive gutter-grating, close to the shops. This side of Easton-road drains towards the Frome, and is sewered. *Gell's-court* is unpaved, with bad drainage. It is very dirty and damp, and very deficient in water, and the little water there is, is not fit for use. The privy is in a most disgusting state. One of the inhabitants states:—

"I beg to call your attention to the state of two courts on Lawrence-hill, Gell's-court and Barrett's-court. The stench arising from the cesspool, and the filth of the tenants, is, in the summer-time, quite pestilential. The cesspool, I understand, has been opened twice lately, to the great annoyance of the neighbours."

170. Near *Easton Villa*, is a very dirty lane. The main road here is pretty good, but ill scraped. In *Easton-place*, the drainage into cesspools is much complained of. *Triangle-place* has an unmade road, not adopted by the parish. The drainage is into cesspools. *Lion-street* and *Eagle-street* are lower down, and rather worse. A considerable row of cottages drains into one small pit. The main street, out of which the above opens, is *Twinnell-street*. At the lower part of it, the road is not made or adopted, and on account of a local dispute, the drainage has been choked, and a sewage pool formed much above the floors of the adjacent houses. This is a strong instance of the want of compulsory power, the parties originally objecting having been rich men. Below these,

are large, highly manured, and offensive gardens. The condition of the lower end of this street may be understood from the following statement by Mr. Daniel Rees, one of its inhabitants:—

“ Twinnell-street is unhealthy in consequence of the great number of cesspools in it, and for want of drainage. I have raised the footpath, in front of my house (27), two feet, within these last seven years, to prevent the water from coming into my house from the road. After two or three days' rain, there is often four feet of water in the middle of the street, in consequence of which the house is constantly damp. Sometimes you may sweep the water off the walls inside the house. There is now two feet of water lying in the middle of the street. I have paid a large amount of taxes as high and bye rates, but there has not been a stone laid down, or anything done, these eight years. I have applied to the Town-councillor for this parish by letter, but I have never received any answer to my application. We, the inhabitants, sent a petition to the Board of Health in Bristol, signed by 103 persons living in the street and neighbourhood, but no attention has been paid to it. There is no water in the street or on the premises, that can be drunk. This house, and the three next, are supplied with water by a well that is quite useless, as the cesspools drain into it, and the matter floats on the surface of the water, and causes a very disagreeable smell. The whole ground, at the backs of the houses, is one common cesspool. The police have been here making inquiry, and can testify as to the correctness of these assertions. I am often obliged to burn tar to destroy the offensive smell. I have done everything that I could do to mend the condition of my house, but nothing effectual can be done without proper drainage. There are persons who own 8 or 10 houses in this street, and who, if possible, will prevent any improvement; all they think of is to get their rent, without the least regard to the health or comfort of the tenant. The situation of the place would be healthy if the nuisances were removed.”

171. *Leadhouse-lane* is in an extremely dirty condition. From the Bristol and Gloucester Railway-bridge, a view is obtained of a very filthy ditch, which rises near St. George's church, receives large quantities of house-drainage in its course, and is carried in a most objectionable position at the backs of houses and across wet lands, and finally enters the Borough, and is known as the Vain Brook. My province did not extend beyond the boundary; but I may notice here a complaint from St. George's parish, which points out some of the nuisances of this extremely dirty quarter:—

“ We, the undersigned inhabitants-of, and householders in, the parish of St. George, county of Glo'ster, hereby give you notice, that to the best of our knowledge and belief, there exists in this parish a great nuisance, caused by the blood and other refuse of a slaughter-house in the occupation of Mr. Jefferies, emptying itself into the ditch running alongside the road leading from Upper to Lower Easton.

“ Also, that the nuisance (of which complaint was made two months ago) on property in the occupation of Mr. John Higgs, still continues. This water-course (as before mentioned) has recently been cleared out and for the most part covered over down to this point. The stoppage

here, not allowing the refuse matter to flow onwards, necessarily forces it back into those portions which have been cleared out, much to the injury of the parties interested therein.

“These nuisances we believe to be injurious to the health and lives of the inhabitants of the district.

(Signed) “ Joseph Tyley. Jas. Porter.
 Jno. M. Gibson. Jas. Parsons.
 William Hobbs. James Tilly.
 William Osmond. Geo. Fleming.
 Joseph Burton. Jno. Dyer.
 William Waters.
 Geo. James Hill, *Curate of St. Mark's.*
 J. D. Noak, *Churchwarden of St. Mark's.*
 J. D. Drummond, *ditto.*
 James Russell Woodford, *Incumbent of*
the parish of Lower Easton.

“This certifies, that I believe the nuisances complained of in this paper may be injurious to the health of the inhabitants of the neighbourhood.

(Signed) “Wm. Mills Grace,
Downend, Nov. 28, 1849. Surgeon.”

Packhorse-lane is in a particularly bad state, near the turnpike. On Barton-hill, is a group of houses draining into a large cesspool, the overflow of which discharges into the open road, a little below. In other cases, the house-refuse passes into the road. Heaps of ashes are piled up in the road and courts, and, in many cottages, the floor is below the road. In *Maze-street*, the road is very dirty. Here is a public manure bin.

172. *Great Western-street* has an unmade and very dirty road. The position is very airy, and there is a good natural fall. Near the *Cotton Works*, the houses are drained into a sewer made by the Company; but the courts are unpaved, the roads unmade, and the whole is in a dirty condition, and many of the houses have no back windows. Mr. T. Powell complains that,—

“The houses situated on Easton-road, parish of St. Philip and Jacob, are without drainage, and have only cesspools, which often require emptying, and produce, on such frequent occasions, a continual nuisance from one or other of the houses. Some of the owners wished to have a drain, a few years ago, myself amongst them; but this was resisted by others, who obstinately refused to agree to it. I have one house situated there, and if it can be made compulsory, I shall be much gratified.”

In the thoroughfares, are heaps of ashes, ordure, &c. There were several cases of cholera here, last year. About 1,800 hands are employed in the adjacent cotton works; many of the work-people live in distant parts of the city and country. Diarrhoea was prevalent in these works, but there were few cases of actual cholera. There is a surgeon attached to the works, and the proprietors have contributed to a neighbouring church.

173. *Silverthorn-lane* runs through gardens, and has some occasional deposits along its course. The bottom of the lane passes under the railway, and is peculiarly dirty. Near the *Iron Works*, the road is very filthy; and between this and the railway, are extensive coke ovens. The smell produced by quenching the coke is complained of all around as a serious nuisance. *Avon-street* is traversed by the railway here, on arches, which are extremely damp, unpaved, and receptacles for all kinds of filth. Several houses are built against them, and quite deprived of ventilation. The drains are choked up, and the whole of the place is in a deplorable state. At *Kilbore-street*, two of these railway arches, of great breadth, meet, and cover a large wet space. The whole condition of the roads about here is very filthy, owing, in some measure, to the damp caused by the weeping of the arches. In the *Dings*, is *Oxford-road*, a group of cottages with small gardens, in an airy position: the road is filthy. There is a cesspool drainage; water is not abundant. The Company's pipes are not laid down here. In *Marsh-lane*, the road is very dirty and unscavenged. In *Tyley's-fields*, the road is unmade; there are bad gutter-grates, and heaps of refuse by the side and in corners. Here is a low, damp, and most objectionable railway arch. The *Dings* is a district almost wholly composed of cottages, very few of which are drained, the rest having cesspools. The roads are filthy and unmade; and although the natural position is airy, and the fall good, and, on the whole, this part of the district not crowded, the condition of the place and people is as filthy as in any part of the borough. There is a great deficiency of water. *Duke-street* is a filthy alley, opening into *Kingsland-road*, a main and populous thoroughfare, in a most filthy state. Mention was made of some *private* drains, but the greater number of the houses appeared to be drained by cesspools. *Sussex-street*, lately built, is broad and airy. The road is in a filthy state. There is much cesspool drainage. *The Nursery* forms no exception to the preceding remarks. *York-street* is crossed by a sewer into which some of the houses drain; this sewer discharges into the Vain. Great complaints were made of the privy drainage at the back, several houses having cesspools. In the rear of these houses, are the filthy gardens upon the Vain already noticed. By the side of *Cook's Vale*, is a large scavenger's depôt.

174. *Albert-street*, and its contiguous lanes, are in a very filthy state, chiefly owing to an open ditch, concerning which I have received the following statement from 17 residents:—

“We, residents in *Albert-street* and its vicinity, beg to call your attention to the state of a running brook, or ditch, at the back of *Albert street*, into which many sewers, or drains, empty their contents, and which, being *uncovered*, sends forth most offensive smells, and thus tends to produce disease. The owners of the property, on one side, are willing to throw an arch over the ditch, but are not allowed to do so by the owners on the other side.”

In *Whipping-Cat lane*, is another scavenger's depôt. *Unity-street* is in a filthy condition, and the road-way is full of holes. *Broad and Narrow Plain* are composed of ancient, and several very large houses, once the residence of wealthy persons. The road is paved, and in pretty good order; the street is sewered, and there is house drainage.

175. *St. Philip's Marsh* is said to be, in great part, below high-water mark, and occasionally inundated. A few houses are scattered about upon it. On its border, divided from it by the feeder, are large *alkali works*, the refuse from which is thrown out to spoil upon the Marsh, and at present covers a considerable space; and as it is necessarily produced in a large quantity, the deposit is likely rapidly to increase. The surface resembles a solfaterra, and in various places is covered with a white efflorescence, through which acrid vapours escape, charged with sulphuretted hydrogen; this, combined with the vapours and smoke from the chimney, forms a nuisance of enormous magnitude, and deserves speedy attention. Below this bank, is an open ditch, charged with the drainage of the mass, and in a very high degree offensive. The complaints of these combined nuisances are by no means confined to the neighbourhood, but extend as far as the village of Brislington. The list of complainants, with numerous poor persons, include many of the higher class. There is a horn manufactory near, also complained of. The following memorial, relating to these alkali works, was put into my hands, and I am bound to say that, having, on two separate days, experienced the effects, both near and distant, I do not think they are here overstated. The owners of the works are anxious to abate the nuisance, and offered to give me any information in their power concerning it:—

“We, the undersigned proprietors and inhabitants residing at, or owning property on, the Bath-road and Totterdown-hill, most respectfully beg leave to call attention to a great nuisance, arising from immense volumes of noxious vapour constantly emitted from a lofty chimney attached to alkali works, near the Toll-bridge. We have to remark, that the locality, where your petitioners reside, has a considerable elevation, consequently, the great height of the stack, instead of being any advantage, is rather an injury, as the vapour is found to strike the high land on which your petitioners reside, and completely to envelope the houses in a most noxious cloud, so dense in damp weather as to check vision. This invariably takes place when the wind is N. or N.E. The volume of vapour is much greater during the night than the day. Connected with this establishment, we wish also to call attention to an immense mass, amounting to many thousand tons of alkali waste, deposited on *St. Philip's Marsh*, opposite the works late in the occupation of the Messrs. Aeraman. This accumulation is going on, we believe, at the rate of 100 tons a-week, and we have reason to fear, that it is contemplated to purchase a portion of *St. Philip's Marsh*, in close proximity with the Bath-road, and very near the

residence of your petitioners, on which to extend and continue a further deposit; for which reasons, we beg to state what we believe to be the chemical properties of this waste, and the probable consequences to be anticipated from its continued deposit, with regard to its chemical properties. After it has been deposited a few hours, it generates considerable heat, in some cases amounting to combustion; fetid vapours are evolved of sulphuretted hydrogen, the smell of which, when the wind from the N. and N.E., is wafted down the New Cut for a very considerable distance, impregnating the atmosphere with an odour often mistaken for that from a herd of pigs just landed from the hold of a vessel. In addition to this, there are numerous small streams of water issuing from St. Philip's Marsh, and emptying themselves into the Avon, all of which are, more or less, charged with sulphuretted hydrogen. A specimen of the fluid, herewith sent, was taken from one of the small streams at its estuary, on the banks of the Avon, and will give some idea to what extent the subsoil of St. Philip's Marsh must be impregnated with this fluid; the consequence of such absorption and filtration through the soil must be to impregnate all water, taken from wells in the Marsh, with a portion of this poisonous matter. The inhabitants of this district have no other water, unless they draw their supply from the river, which is nearly as bad.

"We think no further deposit of this waste should be suffered, in such close proximity with the borough, and that the proprietors of the works should be compelled to condense the vapour, or take some means to prevent its emission from the stack.

"Wm. Stockwell, William Sparks, William P. Francis, Joshua Powell, Jno. Worth, Thos. Baker, William Merse, William Bush, George Tommy, E. Colthurst, Francis Bissicks, William Owen, Jr., James S. Cowell, James Williams, George Langridge, James Langridge, Frederick Whitehorn, Charles Smith, James Jervis, Henry Birne, Samuel Wooles, William Renda, D. Heaven, John Arger, Geo. Harriott, Jno. Gilbert, M. Dodd, Thomas Strangways."

The parish of St. James and St. Paul, forming the DISTRICT was inspected on the 19th instant. Its boundaries and government have already been explained. I was accompanied by the Town Clerk and Dr. Kay; by the Rev. Charles Evanson, Rector of St. Andrew's, Montpellier; Mr. William Naish, Town-councillor for the Ward; Mr. Halsall, Town-councillor; Messrs H. Pritchard, Robert Marshall, John Penny, John Cross, J. Brown, Js. Lloyd, and Jas. Boucher, Commissioners for the District; Mr. Wm. Hitchings, Collector of Rates; Mr. Bell, Inspector of Police; Mr. A. Smith, Surgeon; Mr. Townsend, Land Surveyor; Mr. Mallard, Mr. White, Mr. Armstrong, and Mr. T. A. Beddoe.

176. St. James and St. Paul (Out) contain a smaller proportion of poor than any part of the city, except Clifton and Westbury there being only 12 per cent. of houses rated at or under 5*l.*, at 33 per cent. at or under 10*l.* In Westbury, in part inspected within this parish, these proportions are 11·2 and 25·6 per cent.

177. In the Westbury portion (App. M and L.) there are 9 courts, all closed at one end; 2 imperfectly scavenged, 7 totally neglected, and 5 without drainage. In 2 only is the Company's water laid on. Out of 57 houses, in 27 are complaints of nuisances. As to streets, out of 15, five are scavenged twice, one but seldom, and the rest not at all. Out of 203 houses in streets, 89 take the Company's water. In 119 are complaints of nuisances, and 17 are without back windows.

178. The western division of the district has almost everywhere a good natural fall, and includes a number of excellent houses. The following notes were taken on the spot:—*Nine Tree Hill* has been recently built upon, and is called *Freemantle-square*. The houses are of a superior class; but many of the roads about are in a dirty condition. In *Springfield-road*, the houses drain backwards. The road is in bad order, and has not been "taken to" by the Commissioners. On the south side of *Freemantle-square*, the houses, though inhabited, have no made road. The situation is very high and airy, but the drainage is mostly into cesspools. In *Thomas-street*, though the houses are old, the road has not been "taken to," and is in very bad order. *Belle Vue* overlooks *Rennison's Baths*. The natural situation is superb. It is open, airy, commanding an extensive view. Here is good back drainage. On the hill side, below these houses, was formerly a public spring, the flow of which has been much diminished by the sinking of wells in the neighbourhood, and which has recently been enclosed and covered up. With reference to this spring, Mr. Mallard, a resident in the district, states:—

"The spring called 'Mother Pugsley's Well,' has for 200 years, at least, and probably much longer, been public, and of great utility to the inhabitants of Kingsdown. Across a field, called Pugsley's Field, or Conduit Close, was a public path, near which the spring or springs flowed into two basins, one containing the best drinking water on the hill, and the other water beneficial to persons suffering from inflamed, or otherwise diseased eyes. A few years ago, the field was let or sold for building, and Mr. Huecker, who purchased a great portion of the ground, which he has since covered with houses, has erected a mansion for his own residence called '*Spring Villa*,' and has enclosed the well for his own private use."

179. Close east of St. Matthew's Church, is a back lane, very filthy, but having in it a new culvert. This rises in Wharton-street, in Westbury parish, and gives back drainage to the houses in Cotham-park-road. It is *private* property, and a great many houses along its course, much in want of drainage, do not fall into it. *St. James's Parade*, on the city side, drains backwards, but there are great complaints of bad smells. On the opposite side, the houses drain into cesspools. At one corner of *Montague Parade*, is a house with a cesspool, the contents of which are pumped into the street gutter, and produce a very offensive smell. This sewage

runs by an open gutter down Montague-hill. Great complaints were made at the back of Kingsdown Parade, towards the church, of the want of a drain, for which, if constructed, Mr. Townsend's culvert offers a good outfall. With reference to this quarter of the district, among numerous complaints, I quote a statement by Mr. Evan Roberts, of 13, Kingsdown Parade:—

“The road at the back of Kingsdown and St. James's Parade is almost always floating with water, which sometimes runs into the houses; and when the water dries away, it leaves a quantity of filthy mud, which, in hot weather, is very offensive and unhealthy, and which is left untouched by the scavengers from year to year, who tell us it is not their work to remove it. We have applied to the Commissioners of the District, again and again; and they say that it ought to be attended to, but that they have no money to do it. Many of the residents are the proprietors of the houses, some of whom are willing to pay their part towards improving the road, but others are unwilling to cooperate, and, therefore, it remains undone; and should we again be visited with that fearful disease, the cholera, it might be productive of very serious consequences. In addition to this nuisance, allow me to inform you that there are no gouts or drains to carry away the filth from the houses, but cesspools (which, in some instances, I have been informed, empty their contents into the wells), and, in warm weather, smell all over the neighbourhood.”

180. At one end of Portland-street are two large cesspools which receive the drainage of Portland-street. The smell from these rises through two large gutter grates, recently placed there by the Turnpike Trustees, and is complained of. The grates are temporarily covered over with broken stones. *Portland-court*, opposite the chapel, includes a block of cottage houses, undrained. In *Bailey's Nursery-garden*, in Portland-street, the sewerage, taken from an opening in the culvert, is used for manure, and is complained of by the occupants of the adjacent houses. There is a dirty privy at the extremity of the wall near the culvert. In *Oxford-street*, the contents of a cesspool are pumped up into the street sewer. In *Clarence-place*, the roads generally require sweeping and scavenging. *Clarence-row*, consisting of eight houses, is particularly well paved, but there is no covered drain. There is a privy at the back of each house. The houses have no back windows, only a skylight. The general arrangements are bad, but the place was neat and tidy: 10*l.* was to have been paid for liberty to make a sewer from these eight houses into the main sewer, but this has not been paid, and the cesspool and its pump are still in use. At No. 8, *Clarence-place*, is a cellar, nearly 2 feet deep in very filthy water, smelling offensively. The room above is inhabited by children. It is doubtful whether the road sewer is deep enough to take off this water. In *Highbury-place*, is Baskerville's-garden, in which are two very large pools of privy sewerage draining from the White Bear-yard, and giving out a pestilential odour sensibly perceived for a great distance around.

Close on the other side of the wall is a favourite public walk in Tyndall's Park. In the street leading from St. Michael's-hill to Highbury-terrace, is a very deep sewer draining towards the city. *Walker-street* has an unmade road in a very dirty condition, and in the footway is a pump for lifting the contents of a cesspool into the street drain. Mr. George Cridland states concerning this nuisance, which is opposite to his own door, that "when they pump, the smell is so bad that we can scarcely stop in our houses."

In *Dove-street*, the road is badly made, and the paving in bad condition. Mr. W. Wright, a resident in this locality, states:—

"I beg to direct your attention to the dilapidated state of the road and pavement, at the west end of *Dove-street*, *Kingsdown*. No repairs have been done to that part of the street for the last 12 years.

"There is also a drain emptying itself into the middle of the said street, the stench arising from which, during the past summer months, was intolerable.

"There is also a lane, at the back of the houses at the west end of *Dove-street*, where the inhabitants deposit their ashes, which are allowed to accumulate to several loads. The scavenger's attention has been drawn to this, but it has not been removed.

"A memorial was presented to the Commissioners of the District, praying for the repairs of the said street, signed by myself and 25 other inhabitants, in the year 1846, and again in 1847, but without effect."

181. *Bush-street* is very steep, and a few of the houses have inhabited cellars. There is a great deficiency of water; the only well, during cholera, was dry. The back premises generally are in a slovenly state, and there is a want of dust-bins and proper privy drainage. In *Rennison's-place*, is a general complaint of the drains being stopped up. The court is paved with lias flagging; in it are open ash heaps. There is no water, except by favour from the public-house; a most objectionable system. The only pump was out of repair. In one house, the common privy of the court flows over into the coal-hole. Mr. S. J. Light, who lives near *Dalton's-court*, one of the worst places in this neighbourhood, makes the following statement:—

"The house in which I reside, situate in an avenue leading from *Thomas-street*, *Stoke's Croft*, through *Dalton-court* into *Hilgrove-street*, is, as I conceive, very badly drained; and that the interposition of the proper authorities is necessary to induce the owner of the house to make the proper alterations.

"In the first place, there is, I believe, an old cesspool, under one corner of the cellar, on which I am compelled to keep a body of coal-ashes to keep down the smell arising therefrom.

"In the next place, there is frequently, and sometimes for weeks together, an oozing of filth from the drains of an adjoining house on to the floor of my privy.

"The passage for waste water from the soft water pump in the

wash-house leads, I believe, directly into the sewer, and there being no eject, the smell arises sometimes badly.

“And, upon inquiry, I think it will be found that the common sewer, intended to carry off the drainage, &c., from 3 or 4 houses, as well as the one I occupy, is of very small dimensions, wholly inadequate for the purpose, and within 2 or 3 inches of the surface—the paving stones in the avenue being its only covering.”

182. In *Adam's-place*, (Stoke's Croft,) were great complaints of want of drainage, and the house property is depreciated in consequence. *Stoke's Croft*, or *Jeffery's Gardens*, is a tract of great extent, including a low spongy valley, nearly the whole of which was in an offensive state from vegetable refuse and manure. Above these gardens, on a well chosen site, is *St. Barnabas Church*, a handsome new building, having, as yet, received few or no interments. The gardens in this neighbourhood are largely covered with sewage manure, which is lifted out of the stagnant ditches, and is consequently very offensive. By the *Wilder-street-road*, are offensive cesspools, &c., over the wall bordering the road. In *Grosvenor-place*, the cholera was very severe. This row is nearly in the bottom of the valley; behind it is a large covered sewer. The character of the houses pretty good. *Guinea Gardens* are a large space, occupied chiefly by squatters, inhabiting cottages of one floor, built in part of boards, and irregularly placed; without roads or drains. They are surrounded by gardens and ditches charged with sewerage, and heaps of ashes and ordure. *Newfoundland-lane* is unmade, with deep ruts. It is a mere trough of mud, the common receptacle for all sorts of refuse. In about the worst part of this lane, are some very fair houses, but quite without drainage.

183. *Gideon-place*, abutting on the burial-ground, has defective drainage, with offensive smells. In *Houlton-street*, the road scrapings are stowed at the side of the road for a future footpath; a most objectionable practice, very common in the suburbs of Bristol. In *Frome* and *Skinner-streets*, the houses have been built about 15 years, but the road has never been made, and is in a miserable condition, the receptacle for all kinds of filth. House property is depreciated in consequence, and most of the houses were empty at the time of the inspection. From *Traitor's-bridge* to *Earl's mead-bridge*, the footpath on the Frome side is neglected, and is much encroached upon by the river. *Pearce's Cottages* are a group of buildings erected near a peculiarly filthy open ditch with ruinous banks; close by, is a very large scavenger's depôt. Much of this ground is liable to be flooded. The cottages are mere temporary hovels. *Botany Bay District* is chiefly composed of inferior houses, without drainage, and in a dirty state. *Montpelier-hill*, though covered with superior houses, is without drainage, except into cesspools. In *Picton-lane*, or *Union-place*, is a public-house with an objectionable back entry. In the back street is a

sewer. The Water Company's pipes are laid along the street, and the water is taken by some of the people at a charge of 2*d.* a-week. In *Picton-buildings* the cholera prevailed. My attention was specially called to this place by the following statement by Mr. J. A. Braine, a Commissioner of the District, whose observations appear to me, from what I have seen here, and in other parts of Bristol, to deserve full attention:—

“ In *Picton-buildings* are built a number of small houses, inhabited by the working class, but which are spoiled by being enclosed both back and front by very high walls, which obstruct the light and air. And, increasing the evil, inside the high wall, in front, are planted trees, which are grown to such a height as even to overspread the road. In our Local Act, there is no power given to enforce the lopping of the trees.

“ This confined situation engenders a bad state of atmosphere, especially in the summer: and several persons died of the cholera in this place, last summer.

“ I suppose the only way to obviate these evils must be by stringent clauses in a Sanitary Bill to protect the lives of the poor, and to show the more opulent, that if they live in a close city, they must not destroy their fellow-men by building walls above such a height (say 7 feet), as is necessary to protect their property reasonably from depredation.

“ This evil exists throughout the whole city, and nowhere, perhaps, worse than at the bottom of the four courts in Redcross-street, St. Philip's, where the high walls obstruct the free circulation of air, and partly caused the fearful mortality first to break out there in Bristol.”

184. This district was carefully inspected by the sub-committee of the “ Association ” before the arrival of the cholera in 1849. The following are some extracts from the notes of the visitors on that occasion:—

“ 1. This house, though very small, is four stories high, and contains five miserable apartments; one in each story, except in one instance, where there are two. It is inhabited by five families, with eleven children in the whole. In one garret, reside two families—one married couple with five infant children; another, with one child. The state of this room baffles description. A wooden tub, whence issued an intolerable stench, and from which a stream of filth was oozing on to the floor, is used promiscuously as a urinal by every member of these families. In the miserable bed, in this room, lay an infant in the small-pox. The soft-water belonging to this house, and used for washing the linen of the inmates, has an intolerable stench. Five children in this miserable dwelling are just recovering from the small-pox, not one child in the house having been vaccinated.

“ 2. In this house are at present above 20 inmates; last week, there were 31. The removal of two entire families in fever, during the interval, partly accounts for the difference. The privy, which, whenever cleansed, is cleansed by the woman of the house herself, is, together with the approach to it, in such a state, that the medical member of this sub-committee declares that any one, not accustomed to such

scenes, would, in all probability, be seized with sudden illness, if called upon to visit it.

“ 3. This house contains, at present, about 15 inmates. There are frequently 40. It forms one of six dwellings which open into a common yard. Ten days ago, this yard was one mass of filth; on this occasion, we found the yard swept, and the filth gathered into a corner. The stench, arising from this yard, and from an open sewer leading out of it, is intolerable. In this house is constant fever. We found a young man evidently sickening; and another man, in charge of two infant children, his wife being laid up of fever. In this locality the cholera raged in 1832. * * * The following points forcibly impress themselves upon our minds:—

- “ 1. The appalling prospect which such scenes present, in the event of the cholera visiting Bristol.
- “ 2. The insurmountable obstacle which such a state of things, if continued, presents to the influence of morality and religion.
- “ 3. The vast expense to which such a condition of the people necessarily subjects our city.
- “ 4. The great facility with which much might at once be done to improve the state of things; much must be left to the Legislature, but individuals may do much: inspection alone does much, as this sub-committee have had reason to know when comparing the condition of some houses with that in which they were found a few days ago.”

185. CLIFTON.—This important suburb of Bristol was inspected on the 18th instant. During the whole, or part of the visit, were present—the Town Clerk and Dr. Kay; the Rev. J. Hensman, Vicar; Mr. White and Mr. Hautenville, churchwardens; Mr. W. H. Gore Langton, Mr. Halsall, Mr. Green, and Mr. H. Visger, members of the Town Council; Mr. Hadow; Mr. Claxton, treasurer, and Mr. Marmont, surveyor, to the society of merchants; Mr. M'Adam, surveyor of turnpike roads; Mr. Morgan, collector of poor rates; the Rev. Mr. Walsh, minister, and Rev. Mr. Nurse, curate, of St. John's, Durdham Down; and several other residents in Clifton.

186. Clifton contains only 10·7 per cent. of houses rated at or under 5*l.* rental, and only 30·4 per cent. at or under 10*l.* Unfortunately, however, nearly all the poor cottages are crowded together, along Jacob's Wells, and the low, damp, Hotwell-road, and the condition of this district is very bad indeed. The police return for the Clifton district (Appendix M. and L.), shows that all its 56 courts are closed at one end; that, in all, the scavenging is totally neglected; 15 have no made surfaces; four only are supplied by the Water Company; and out of 321 houses in courts, 154 have no back windows, and in 74, are complaints of nuisances. There are 91 streets, all unscavenged. Out of 955 houses in streets, 220 are supplied by the Water Company; 110 are without back windows; and in 180, nuisances are complained of. I am

indebted to Mr. Hadow, secretary to the "Visiting Society," for reports of the condition of the houses in Jacob's Wells, Berkeley-place, and the Hotwell-road; and to the Rev. Mr. Walsh and the Rev. Mr. Nurse, for similar details from St. John's, a district in Clifton.

187. The following are the notes recorded on the spot:—

Proceeding from Bristol, the parish of Clifton commences at *Woodwell-lane*, in a very dirty thoroughfare on the west side of which are a number of low unhealthy dwellings, some of the worst being situated about *Jacob's Wells*. Concerning this district the visitors state,—

"The houses in *Lambwell-court* are very small and in bad repair. In the entrance is a common pump, badly arranged, and the source of much dirt. The drains also, at times, are annoying. *Jacob's Wells*, in this district, is a very dirty place.

"In a kitchen, in *Lambwell-court*, a donkey is kept; most of the rooms are badly ventilated."

North-east of *Woodwell-lane*, is *World's End-lane*, a steep by-way, with occasional steps. Communicating with this, are several groups of inferior cottages, built on terraces on the steep hill side, in one of the best situations in Bristol. But, although peculiarly open and airy, and with an excellent natural fall, there appears to be no drainage whatever. The courts are unpaved, and the ground slopes towards the houses. Here, in 1832, cholera extensively prevailed. The smell from a privy was complained of. No ash-bins. The house refuse is thrown into the road. In one house, a family of 11 occupy one room and a small closet. Several of the inhabitants have to fetch their water from a considerable distance.

188. In *Lower Whittaker's-buildings*, in an unpaved court, is a very large open ash-heap. The lower story of one house is used as a public receptacle for filth. The people living on the floor above this complain of continual bad smells from it. There is no public scavenging in any of these courts, though very much needed. These houses, like nearly all those in this part of the Hotwell-road, are built against the hill side, and are extremely damp. The rock is here the millstone grit, which is usually charged with moisture. Some of the covered entrances are used as public depositories for ordure. There are some extremely offensive deposits in *Edgar-buildings* and *Gibraltar*. Pigs are kept by some of the cottagers. In one of the Southern Hay cottages, rented at 10*l.* per annum, out of four rooms, only one is habitable, on account of the dampness of the walls. The health of the inhabitants is injured by this cause. *Norman's-court* has a very narrow, dirty entrance. There is a sewer, in the hill side, at the back of some of the houses, and one house, in consequence, is extremely wet and scarcely habitable. A court, behind the "King William" public-house, combines all the worst features of these hill side houses,

having crowded, damp, back premises, privies draining upon the houses, a deficiency of drinking water, and a perpetual oozing into the house from the wet rock behind it. There are ash-heaps and deposits of house refuse in every corner. There is much disease here. The rent is from 1*s.* to 2*s.* 6*d.* per room, per week. House, No. 43, is next to a quarry, and worse, if possible, than that last noticed. A very steep and narrow stair brings down the drainage into the house. The privy is in a cellar. These houses all face to the Hotwell-road. In No. 48, more attempts have been made at internal cleanliness, but there is a privy immediately above the house. Cholera prevailed here in 1832, and there was one case in 1849. The tenant complains of the damp wall of the room, which being also a retaining wall, has fallen in. There is a scavenger's yard opposite Mardyke House. With reference to the want of water in this district, the visitor observes,—

“Want of water has an injurious tendency on the morals of the inhabitants: 1stly, in producing dirty habits: 2ndly, in inducing them to frequent ale-houses, where the proprietors will supply them with water gratuitously or at a low rate, only on the condition of their purchasing spirits.”

189. *Church-path, Halburton-place.* The houses are fairly built, having neat spaces in front, and a good coped dwarf wall in creditable order. The rent is 15*l.* a-year. Below these, are seen the backs of the courts in the Hotwell-road, for the most part in a ruinous condition, undrained, and very filthy. There are gardens behind which drain upon these houses. On each side of the church-path, is a streamlet caused by ooziings from the different houses; it is very offensive. In *Gibbon's-court, Church-path*, are six houses. There is no water, hard or soft. A common privy and drain are much complained of. *Pillinger's-court* is very badly pitched, and the gardens drain upon it. There are complaints of a bad sewer, and there is no ventilation. The privy is in a room. At the point, on the opposite side, are some bad courts, between the road and the river. Their pavement is bad, the smells are offensive, and there is no water. The visitors of the Clifton Public Health Committee observe,—

“Between Jones's-court and Avon-square, are a slaughter-house and a piggery, most serious nuisances to all the neighbouring inhabitants. This is increased, at times, by the boiling up of entrails and other offal for the pigs, to a degree which is almost intolerable, and penetrates even through closed windows. *Jones's-court.* Under the steps which lead from the lower to the upper part of Jones's-court, are two privies, common to the eight houses, (each lodging on an average six individuals), and which are often obstructed. The upper court, consisting of 10 houses, is also furnished with only two privies, which are in a passage leading out of its upper extremity, and which constitute the only accommodation of this description for about 60 persons. These poor people seem insensible to the nuisance in the midst of which they live, and which, to the visitors, was ‘abominable.’”

190. *Avon-square* is very airy, and has a raised footpath with privies and ash-pits under it, but also under the house-doors and windows. The houses are very damp. Although water is scarce, and the Water Company's pipes are laid along the Hotwell-road, only very few of the tenants take the water.

The visitors observe concerning this square,—

“ It is wholly unpaved ; and in wet weather, in very bad condition, lodging water, &c. There is a drain in the centre, open, and very filthy, into which all refuse from the houses is thrown. It is obstructed, and a most foul stench issues from it. There are several common privies, some without doors, along the upper side of the court. There is a pump in this court, forming a parallel to that in *Pembroke-court*, unused, because within a yard of the privy ; and water is consequently obliged to be fetched from ‘ *Hilhouse's pump*,’ at a distance.”

191. *Black Horse-lane* is flooded occasionally. In a court, facing the houses, is a public ash-pit and manure heap. From this lane to *Mardyke Ferry*,—

“ The *drainage* is, throughout, bad ; and offensive effluvia are complained of in many places. This was especially noticed at Nos. 26, 16, 15, 14, 13, 12, 11, and 10. From No. 10 to 13 (inclusive), *cesspools* have for some years been substituted for a large drain which formerly carried off the sewage into the *Float*, but which appears to have been cut off. Much and serious annoyance occurs from the emptying of these *cesspools* ; and in a cottage, in the garden of No. 10, the water rises in rainy weather level with the fire-place.”

Near this, is *Pembroke-court*,—

“ The flagged pavement of this court is somewhat dilapidated ; and the *drainage* very faulty. Along the rear of the houses, on both sides, passes a drain, which, receiving the contributions from each house separately, empties itself into the common sewer in the lane. These drains are represented as being very near the surface and badly constructed ; and when obstructed (which very frequently happens), discharging a *foul and highly offensive leakage through the floors* into the dwelling-rooms on the ground-floor.

“ There is a dismantled pump in this court, deserted by the inhabitants in favour of one at a distance, owing to the contamination of the water by adjoining impurities.

“ There were six cases of cholera in this court, in 1832, and the houses in it are in a state of neglect as to repair and drainage, pregnant with danger at a time like the present.”

192. *Rees's-court* is clean and well paved, but very damp. The hill side behind is wet. There is no supply of water. Fever and sickness have frequently prevailed here. In *Morgan's-court*, *Love-street*, is a large piggery and a slaughter-house, with houses and workshops around it. The surface is unpaved and very filthy. In *Rowham-place*, is a *slaughter-house* much complained of. It is damp, low, and ill-paved. The Company's water is taken in. Mr. J. M. Hyde, a resident in *Grenville-place*, makes the following statement concerning the several local nuisances :—

“ 1st. I wish to direct your attention to the fact of droves of pigs and cattle passing from the Hotwells to the other end of the city ; the remedy for this is simple : I suggest that the stock imported from Ireland should be ordered to go up the Cut instead of through the city ; it would be a more direct road to the cattle-market and railway ; the reason they do not take this road is in consequence of a toll-gate, which now belongs to the city, and as no revenue has been derived from this source, there would be no loss in allowing the cattle to pass through free.

“ 2nd. I have been requested by many of the inhabitants to direct your attention to the existence of a cab-stand, close to the doors of the houses in Brunswick-place ; the nuisance from this is very great, and the houses are frequently filled with a disagreeable smell resulting from the accumulation of horse-dung, &c.

“ 3rd. I am not aware whether you have any power in reference to reducing the number of beer-houses or not ; but in this district they are very numerous ; it would be a very great boon to society, and a great good to drunkards themselves, if the number of beer-houses, generally, could be reduced to something like one in every 100 yards, or one to every 100 houses, or some other check put upon their number.

“ 4th. I beg also to suggest that the poor-house, built by the parish of Clifton, and now unoccupied, be appropriated as a model lodging-house for very poor people ; it would be a great advantage to them, and, in all probability, prevent many industrious poor from becoming paupers.

“ 5th. I also beg to say there is a considerable quantity of water running to waste through Jacob’s Well, that may, with a moderate outlay, be used in a public bath, similar to the one now erecting at the other end of the city.”

193. The cab-stand is the subject of general and well-merited complaints. It might just as conveniently be placed near the basin, and the stand itself should be paved and drained. Mr. Chubb, commenting upon this cab-stand, observes,—

“ I have 16 houses there under my directions, and some of the tenants have left, and others are threatening to leave, in consequence of the nuisance.”

The following memorial sets forth this nuisance even more strongly :—

“ We, the undersigned owners and occupiers of houses in Brunswick-place and Caroline-row, Hotwells, in the parish of Clifton, beg to call your attention to the serious nuisance we have to contend with, caused by the accumulation of filth, dung, and stagnant water, arising from a row of pony cars, placed close to our doors ; thereby endangering our health, and the health of the inhabitants, especially in the summer months, when the dung and stagnant water is often allowed to remain before our doors for two days together ; and when opening our doors or windows, the stench arising therefrom has very often made us sick. Many of us have been to a great expense in furnishing our houses as lodging-houses, and we have had highly respectable families as lodgers ; but they would only remain a short time, on account of the dreadful stench from the horses’ filth, and the obscene conduct of the flymen,

whose conversation and conduct is quite corrupting to the morals of our children. We have presented a memorial, with two certificates from medical gentlemen, to the Town Council and the Board of Guardians, complaining of this nuisance, but without effect. We have not been altogether free from the cholera in Brunswick-place, and if this nuisance is allowed to remain, we fear what the consequences might be, should this fearful pestilence again visit our city.

“ David Williams, John Genge, Rebecca Cock, Amelia Goss, James Flinn, John Thorn, James Bryant, William Needes, Charles Guest, John Perry, Henry Mason, M. Stone, Charles Gulley, Ann Bailey.”

194. This part of Clifton suffers under a complication of nuisances; and they are, for the most part, such as nothing short of the powers of the Public Health Act, vigorously applied, will get rid of. Mr. E. Waring, who lives in Dowry Parade, states:—

“ The first nuisance is a constantly-increasing heap of ashes and offal near my garden door, brought thither from various quarters, and deposited from time to time, in defiance of all expostulation.

“ Another, is a grating or gulley-hole, close to a cottage, the poor inhabitants of which are often nearly poisoned by the stench, which is often perfectly horrible; and, I have no doubt, occasions the attacks of diarrhœa, for which these poor people are frequently applying to me for a gratuitous dose of medicine.

“ The whole property of the ground lies in the Company of Merchant Venturers, who must, I think, have powers to do away with nuisances; but I cannot find out the proper way of inducing them to exert those powers.

“ On the general question of malignant effluvia, permit me to say, that unless proper ejects are compulsorily affixed beneath every open grating, it will be impossible to keep our nostrils sweet, or the atmosphere wholesome.”

The visitors state that—

“ Opposite the Gloucester Hotel stables, is a void piece of ground which is used by the occupants of these, and other houses adjacent, as a receptacle for ashes, rubbish, &c. The information given by these parties is, that they are never removed. The landlord of the Cumberland Hotel states, that sometimes a very bad smell proceeds from the drains, when westerly winds prevail. The illness of his children was attributed, by the medical attendant, to the offensive smell which was recognised by him during his attendance.”

195. *Cumberland Cottages*, on *Granby-hill*, have a public privy under a dwelling-house; otherwise they are clean and neat, and in a very airy situation. The drain is complained of as very offensive. It receives a considerable amount of house drainage, and smells accordingly. The occupant of a house in Dowry-place complains of the defective drainage in the house. The pump in the rear of these houses is very much out of repair. The water is also ren-

dered totally unfit for use, in consequence of a leakage from the drain into it. The smell also is very offensive.

The general want of a water supply to the dwellings throughout this entire neighbourhood, is best illustrated by the fact, that some half-dozen persons earn a livelihood by the carriage and sale of water fetched from Hilhouse's pump.

196. *Back of the Crescent*.—From some of the cesspools here, the inhabitants are obliged to pump up the contents into the gutters; thus producing a nuisance much complained of. On one side of the road, is a long, continuous line of bins for horse manure, ashes, &c. Next to Pickford's, at the back of the Crescent, is a deep pit, made originally for dung, now used as a privy cesspool. It is very imperfectly covered, and is much complained of. There is no drain leading from it. *Waterloo-place* has a dirty road, and in bad condition, it having been broken up lately by the Water Company. There is no drainage. The privies fall into cesspools. There are several close courts at the back of the Mall, and Mall Hotel. The property is said to be in Chancery. Those living in the Mall are probably little aware of the crowded places within a few yards of their back windows. There is a public urinary at the hotel tap, much, and most justly, complained of. It is extremely offensive. In *Beaufort-buildings*, there are said to be no sewers at all. *Victoria-square* is a new, broad, and remarkably handsome pile of buildings, with broad footways, and an open space in front. The whole is drained. This is the property of the Society of Merchants, and does that body very great credit. The state of this property shows the advantage of a uniform arrangement under one governing body. *Richmond-terrace* is composed of houses of a good class, in an airy and open position, but nearly all drain into cesspools; and to this was attributed a severe epidemic fever which recently prevailed here. *Belle Vue* is stated to be well drained. *Clifton Park* is a fine, open space, second only to *Victoria-square* in appearance. Here is no drainage, except into cesspools. In *Somerset-place*, were complaints of an entire absence of sewerage. Capt. Thorne speaks

“Of a very serious nuisance I experience at my residence, No. 3, Somerset-place, Clifton: a pit, at the back of my house, which all the soil, slops, &c., fall into; also the three adjoining houses do the same. About every 12 or 15 months, it requires emptying; and there being no thoroughfare by the back-way, all the soil has to pass through my kitchen; in consequence, I am under the necessity of leaving the house for a fortnight or three weeks. It so happened, on the last occasion of its being emptied, the cholera was very prevalent; adding much to the danger of the public health in the neighbourhood. It requires two nights to empty the pit.”

Cambridge-place is a part of a large tract of ground covered with a good class of small houses, all of which drain into cesspools, and are without sewers.

197. The district of St. John's, in Clifton parish, contains a population of 2,000 persons, and a large proportion of poor. Though possessing a remarkably fine position, it is very defective in all sanitary appliances. The Incumbent, the Rev. H. G. Walsh, with his Curates and the parish officers, accompanied me over the district, and delivered to me the report of a Committee of Visitors, formed under his auspices, and whose inquiries appear to have been very searching. The principal nuisances complained of are certain open gratings near the Black Boy tavern, the church, and White Ladies' gates, whence intolerable effluvia arise; the total absence of any scavenging for the courts and narrow lanes; bury road, is a large group of cottages, standing on the limestone and the general want of drainage and water, proper privies, and ashbins. At the junction of *Durdham Down* with the Bristol and West-rock, in a situation high and airy, possessing great natural advantages. These cottages are badly built, and undrained; their back roads are unmade, very muddy, and disfigured with heaps of house refuse and ashes. Water is very scarce here, though the Company's reservoir is just above. Part of this group stands in a large old quarry, without any drainage. The inequality of level is very great, and produces damp. There are pig-sties and ash-pits everywhere to be seen, and but few privies. Near the limekilns, themselves a considerable nuisance, is a public manure depôt; a very filthy place, surrounded by cottages. Mr. Ball states—

“That the inhabitants of Clarence-place, in the parish of Westbury, are annoyed by a most unpleasant smell, arising from the occasional pumping of a cesspool, situated in the upper part of the street, called Clarence-row; also by the dirty state of the road.”

And with reference to the same locality, Mr. William Roberts complains of—

“A nuisance of a most formidable character, existing in Clarence-place, Kingsdown, in the parish of Westbury-upon-Trym.

“In the first place, the drainage is in an exceedingly defective state; so much so, that very frequently (especially after rain) the cellars of many of the houses are covered, to the depth of several feet, with sewage and other filth. The cellar of the house in which I live (No. 5), has been completely filled with small stones and clay, for the purpose of keeping back the filth that escapes from the drains.

“Another cause of complaint is, that there are two large cesspools directly under some of the houses, which are emptied about once a month, by means of two pumps, causing such an intolerable stench, that it is next to impossible to remain in the adjacent houses. This pumping usually commences at 10 P.M. and is continued till 4 or 5 the next morning.

“Thirdly, the supply of water is exceedingly scanty; and previous to the introduction of the Water Company's supply, many of the houses were not supplied with any hard water, and some of the houses are even now without it, although the tenants have offered to pay for it, provided the landlords will lay down the pipes.”

198. The *White Ladies'-road* has an open gutter, down which the house drainage runs into a side ditch, and is most offensive. This road is very imperfectly lighted, some of the lamps being 80 yards apart. Lower down, opposite Garraway and Mayes' nursery, the drain is peculiarly offensive. Above White Ladies' Gate, in the bottom of the valley, several open drains meet, and their contents are generally complained of. In a field, in front of West Clifton-terrace, the sewerage escapes over a large space. The whole of this nuisance is by the side of a great thoroughfare, and in front of excellent houses, all of which drain either into cesspools or into these ditches. Mr. Morgan complained particularly of this nuisance. The following relates to it:—

“ We, the undersigned inhabitants of West Clifton, complain of a nuisance arising from a grating close to a footpath in the turnpike road, opposite our houses, from which a most noisome smell proceeds, occasioned by the sewage, conveyed by a drain from the houses in West Park, emptying into the gout crossing the road from West Clifton-terrace, and from thence being conveyed to Baptist Mills and Bristol into the Frome.—February 19, 1850.

Richard Bennett, Dorset Villa.
Mrs. Phillips, Devon Cottage.
Henry Taylor, Melrose Villa.
Thomas Brooks, Cambria House.
Thomas Willcox, Berthery House.
Mrs. Henry James, 23, White Ladies.
Wm. Morgan, proprietor of houses in
West Clifton.

G. T. Clark, Esq.,
Inspector for the General Board of Health.”

The visitors observe, with reference to some of these localities,—

“ *Tedder's-row*.—1st house: Seven rooms, dirty, and out of order. Privy, drain, and cesspool; a sink close outside the door. Road very bad from ashes and other refuse thrown out. No scavenger. Rent 10 per annum.—2nd house: Five rooms; three inmates. A privy, close outside, leads into a drain and cesspool; cistern water, by pump, inside. Obligated to buy water in summer. Ashes thrown out by neighbour cause nuisance and annoyance. No scavenger. Rent 9l.—3rd house: Five rooms; roof bad. Privy, drain, and cesspool. Water insufficient in summer, and has to buy from cart. Refuse taken away to quarry. No scavenger. Rent 9l.—*John Hyde*: Five rooms; two adults, three children. Annoyed by nuisances around. Privy, drain, and cesspool. Scarlatina lately. Rent 9l.

“ *Tedder's-buildings*.—2nd house: Eleven rooms; four inmates, two adults, two children. Water cistern; open drain. Very offensive privy and drain.—*The 2nd Cross-street (east and west)*: Quarry very soiled and offensive. Dangerous.—*South side*. 1st house in a court: Five rooms; two adults and four children. Privy outside, in yard. Cistern water; none in summer. Buy water at 6d. per week for washing. Nuisances outside very bad. No scavenger. Rent 8l. 8s.—*Sarab's court*. *Mary Thomas* and *Rebecca Morgan*, sisters: Two adults a

one child; four rooms and back court. Cistern water. Privy outside, into drain. Drainage bad and offensive; empties itself into quarry-pit, close at hand. Rent 9*l*.—*The 2nd Cross-street. 1st house westward*: Four rooms; two adults and six children, from two to fifteen years old. Dirty, from stable above. Ashes and filth within, in a heap, in back kitchen. Had small pox. No privy. Five years' residence. Adjoining stable (Harding's). Soil oozing through walls into the premises; in rain, flooded from same quarter. Five horses generally kept. Large dung heap at door. Four children had measles together; three died. Has lost seven children out of thirteen. Rent 8*l. 8s*.

“*In a court off 2nd Cross-street. George Kelley, gardener*: Out of order; dirty; smells. Four rooms; two families,—two adults and four children; and three adults: total nine. No water. Privy in back kitchen, outside. One child sick in bed.—*John Dawes*: Works in quarry. Three rooms; two adults and six children, and two other children. No water. Privy, pigsties, &c., in small yard adjoining, very dirty and foul. Small pox. His own house.—*George Diaper*: Quite in pit of quarry. Three rooms; one widower and five children, and one other adult. This tenement in stable-yard of George Williams, where horses and pigs are kept, manure, &c. Vast quantities of ashes and soil brought here and deposited. Cistern water near front door; lid off; dirty and dangerous. Rent 2*s. 6d.* a-week.—*North side of Steps. Isaac Hughes, butcher*: Two rooms and small “lean-to;” two adults and five children. Very dirty and miserable. Stands by itself, surrounded by the foulest matter. No privy. Rent 2*s. 6d.* per week.”

199. The visitors make the following general observations upon this district:—

“The houses are, for the most part, in fair repair, and in good condition, many of them being new, or nearly so.

“From the elevated position of many of the houses, the supply of light, and the ventilation, are good. The windows, however, in almost every house visited, opened only at the lower sash.

“The most important point, calling for especial notice, is the lamentable state in which this portion of the district (if not the whole district at large) is placed in reference to drainage.

“It would appear that nearly all the drainage is collected in four cesspools, the largest being situated under the road, opposite Burlington-buildings; the second, near Myrtle Cottage; and the third, under the Green, opposite Vincent-place. Some portion of the drainage appears to pass into the premises belonging to Mr. Ricketts.

“The visitors could not ascertain if any sewer existed communicating with those connected with the city. There is every reason to believe that such is not the case, and, therefore, that the whole of the sewage is necessarily retained within the locality, to percolate through the strata of rock and earth, and to disseminate its poisonous properties wherever it may find the readiest course. This statement is particularly applicable to a cesspool behind the houses 13 and 14, Bindon-place, which, when made, was not cemented, with this especial object in view, that the contents might the more easily escape and drain away.

“The supply of hard water in this portion of the district is singularly defective, inasmuch as not more than three or four houses have such an accommodation upon the premises.

“The next point to be noticed is, the want of good scavenging, which would render the dwellings of the humbler classes more healthy, and would lead to habits of cleanliness in many instances where the reverse obtains under the existing defective mode.”

200. *Hampton-terrace* suffers materially from an old ditch in which the sewerage is collected. The value of property here is stated to be depreciated from this circumstance. Mr. Hain, of White Ladies, observes:—

“The drains from Durdham Down run to West Clifton-terrace. A great part of the principal drain is open, and in hot weather very offensive, and from West Park to West Clifton-terrace, though a covered drain, has a grating, which in hot weather, is also very offensive; it then runs under the White Ladies-road and the houses, and along the foot of Hampton-terrace. From thence it finds its way to the Frome River, at Baptist Hills.”

201. At *Burlington-buildings*, are two large cesspools, which have no overflow. Near South Parade, towards the reservoir, is a road lighted by only one lamp: it is a perfect quagmire. This neighbourhood has no drains, and cesspools are general. Near the reservoir, is a very filthy scavenger's yard by the road-side. Mr. C. J. Kelson, of No. 9, Vittoria-place, states, that owing to the defective drainage, “at night, as soon as the house is shut up, we can hardly bear ourselves with the stench; and I have, as well as others in the house, suffered lately several times from bowel complaints, no doubt arising from this cause.”

202. In the main road, leading from Park-street to Park-place, are four separate drains, two sets of gas-pipes, and two sets of water-pipes: three of the drains are private, the fourth is under the Turnpike Commissioners; the water-pipes are under the Water Company, and the gas-pipes under the two Gas Companies. Thus, there are seven independent parties who have an excuse for breaking up this one road. A little below Tyndall's Park-gate, on the opposite side of the road, at the back of Park-place, is a peculiarly filthy cross road and a market garden, the stench of which, from vegetable refuse, &c., is much complained of. A little above Bishop's College, are heaps of scrapings by the side of the turnpike-road.

203. It is marvellous that a parish so wealthy as Clifton, and of which the show parts are so handsome, and which, moreover, is dependent for a part of its wealth upon its character for cleanliness and health, should allow the existence of a mass of nuisances like those noted in the above account. No doubt they are to be attributed, in great measure, to the want of power in the parish-officers to rate for sewerage, or to compel the house-owners to take in water, or provide house drainage.

204. **BEDMINSTER.**—It has been shown that Bedminster contains 33·9 per cent. of houses, at or under, 5*l.*, and 72·5 per cent.

at or under, 10*l.* rated rental. It is, therefore, a very poor parish; the poorest but one in the whole city. It appears, by the police return (Appendix M. and N.), that out of 103 courts, 94 are closed at one end; 24 have no made surface; not one is ever scavenged or has its ashes removed by the public officer; and 7 only are supplied with the Company's water. Also out of 840 houses in courts, 447 suffer from nuisances. Out of 63 streets, none are ever scavenged. Of 2,216 houses in streets, 299 only are supplied by the Water Company; 865 suffer from nuisances, and 267 have no back windows. Bedminster, is therefore, a poor, dirty, and badly-ventilated district. It contains several collieries, in which many of the people are employed.

205. On the 14th instant, I inspected this division of the city. I was accompanied by the Town Clerk, Dr. Kay, Dr. Green, Mr. W. H. Gore Langton, Mr. Lucas, chairman of the Local Board of Health; Mr. Smart, parish surgeon; Mr. Room, parish clerk and relieving officer; Mr. Sweetman and Mr. Reynolds, surveyors to the East and West Tything; several inhabitants of Bedminster, and the officers of police.

206. The condition of Bedminster is materially affected by the disposition of its surface, already described, and almost all its evils are connected with want of drainage. A small part of Bedminster lies beyond the New Cut, and is mixed up with Redcliffe; the remainder lies between the high bank of the Cut, and the continuation of the Pyle-hill range. Much of the town is built in the valley of the Maligo. Its deficiencies in drainage, lighting, and decent roads, will be noticed under the proper heads. In this place, the description will show the effect of these deficiencies upon the dwellings of the people and upon the people themselves. The cholera, as might have been expected, and was foretold, ravaged Bedminster in 1832 and 1849; and the districts in which it was most severe, differed from the rest in that they were most damp, and traversed by stagnant ditches charged with fæcal matter, and, even now, by no means improved.

207. The following are the notes taken on the spot during the inspection:—Crossing Harford's-bridge, from Bristol, is a small portion of the parish of Redcliffe, the boundary of which is marked by a gas lamp—a luxury unknown in Bedminster: it is placed near the *Station House*, a well-built and extremely well-ordered establishment, having water-closets in the cells. It stands in *Nelson's-gardens*, a space of rather above two acres, lately cleared of about 100 small tenements by the Corporation, and kept open. The main road here has heaps of scrapings piled up at the side, and but seldom removed. The side roads are in a very bad state. *Regent-road*.—A ditch, at the back of Charlotte-row, is much complained of; and the cholera, which raged here, is referred to this cause by the medical officer. Behind, is a large spongy

meadow, a receptacle for house refuse, and very filthy. Skirting the houses, is a ditch receiving privy drainage. In the gardens are pigsties. There are but few privies, and those very filthy. On the bank are heaps of ashes and cleansings from the ditch. The Maligo, or Bedminster brook, runs under the houses at the end of Charlotte-street. Their front to the street is one story above the back. In this stream, on the opposite side, a ditch enters from behind St. Paul's Church and Southville, and skirting the bank of earth thrown out from the New Cut, and now built upon. The following statement comes from inhabitants of Charlotte-street:—

“Charlotte-street, Bedminster,

“February 14, 1850.

“WE most earnestly beg to call your attention to a very grievous nuisance, under which we have been suffering for many years. Close under our dwellings, for some distance, runs an open ditch, that receives all the filth and sewage of an extensive neighbourhood. The return of summer is annually dreaded by us, as it brings with the warm weather disease, fever, and death. Having hitherto complained and suffered without redress, we trust you will give it your consideration; and we, as in duty bound, will ever pray.

“Benj. Hope Southy, *Grocer*; Joseph Rawle, Henry Manning, John Loddy, Henry Shrole, John Hunter, John Hale, John Puddy, Charles Davis, William Davies, B. R. Chard, Robert Murly, William Sampson, Mark Oliver, Henry Hill.”

The ditch, below Dean-lane or Southville, is very filthy, and much complained of. Ashes are thrown out upon the bank; it receives the drainage of a large part of Bedminster, and is only very partially covered over. At the south end of Dean-lane, is a coal-pit, and a very large scavenger's depôt, and in the midst, a well, the water of which is used for drinking, being, in fact, the only water the people can get. The manure is for sale at 6*d.* per ton; and even at this price there is very little demand for it. A resident here states:—

“My wife and children are almost suffocated, at times, with the Dean-lane ditch and scavenger's yard, and the stinking steam from the coal-pit.”

208. *Paradise-gardens.*—A row of houses on a low, spongy meadow, with a stagnant open ditch, filled with house refuse. The stench even in this wet weather, is dreadful. This ditch receives and retains the sewerage of a considerable tract of houses; it is of great length, having several arms which intersect the meadows. It is, in fact, a collection of old boundary ditches, now completely stagnant, and charged with sewage. That this is by no means a recent evil, and that the attention of the parish authorities was called to it before the appearance of cholera, is shown by the fol-

following extract from the Report of the Sub-Committee of the Bristol Health Association, published in May, 1849:—

“The open ditch at the back of the White Horse, Bedminster, it appears, had been cleaned out soon after the Committee’s former visit; but the evil complained of is again increasing, and will, necessarily, ere long, become as formidable a nuisance as before. ‘It was cleaned out,’ our informant stated; ‘but the smell,’ she added, ‘is very bad, and something further ought to be done; it should be covered over.’

“The ditch, or rather cesspool, which is the receptacle of the sewerage thus conveyed, was in the most foul and abominable condition possible, nothing having been attempted here in the way of remedy. Situated at the corner of a field, for which, with the addition of some dry material to absorb the more liquid portion, it would prove valuable as manure, it is still suffered to remain, a disgusting and pestilential mass, affecting the surrounding atmosphere.

“A similar partial and temporary expedient in the way of cleansing, had been resorted to in the instance of another extensive open ditch running directly in front of the houses near Dean-lane. One of the resident parties who signed the formal notice some months ago, addressed to the proper authorities, complaining of its state, reported ‘that nothing had been done to relieve the nuisance except for the time; so that it will necessarily recur; there being no stream or flush of water to carry off the refuse matter.’ In passing, the Committee observed that the turn of the road, leading to the Star Inn, was encumbered with heaps of dirt and refuse, and that it appeared to be used as the ordinary place of deposit.

“The same objectionable practice, to a still greater degree, obviously obtains along the main road extending from the tan-yard to the parish ‘ley-stall,’ the scrapings of the road being allowed to accumulate so as to form large mounds.

“In the front of some houses, at the back of Mr. Jenkins’s tan-yard, the space between them and the opposite building not exceeding 12 or 15 feet, in consequence of the drain being choked, all the filth and liquid refuse is detained, emitting the usual offensive and obnoxious effluvia. Close to the dwellings, was a large heap of ashes, &c.; and matters have been in this state for ‘six months or more.’

“Your Committee can scarcely hope to convey anything approaching to an adequate idea of the disgusting and disgraceful state of the reality, as presented to their notice at the back of Charlotte-street—a row, consisting, probably, of 15 or 20 houses, with small gardens, a few yards in extent, in the rear, and the usual ornamental erection at their foot, abutting on the large, open ditch in the adjoining field. The difficulty arises, as just intimated, both from the nature and enormity of the evil itself, and the impossibility of conveying, in decorous language, a faithful description of the original; but they will make the attempt. Let the reader imagine, then, an almost stagnant, gaping ditch, running parallel with the range of houses in question, the common and immediate receptacle of all that proceeds (and is ordinarily concealed) from human habitations: too sluggish to carry off, otherwise than very partially, what is constantly emptied into its bed, and still further arrested, at intervals, by accumulated deposits of ashes and refuse; the whole fœtid and polluted abomination appealing, in the name of decency

and common sense, to other offended and nauseated senses, for its instant and utter removal and extermination.

“Your Committee were informed by the inhabitants that this ditch had likewise been cleaned out a few months ago. They spoke of the smell arising from it at all times as ‘awful,’ and complained that they were ‘like to be poisoned.’ Mr. Antrobus, the collector of the borough rates, it was further stated, had frequently represented, in the proper quarter, its unhealthy character.”

Southville-road, near the new, or St. Paul’s church, contains a superior class of houses, but with no drainage, except into cess-pools. The road is unmade, and very dirty. There is a burial-ground attached to the church, but the burial fees are high, and consequently there are but very few interments. It is the general practice, in Bedminster, to build and let the houses to tenants before making the roads. The sewers are not made at all. “Mr. Hodson describes a number of filthy ditches between Southville and East-street, and continued through Terrell’s-gardens, all open, and during the summer months almost intolerable.”

209. *Coronation Villas*.—A row of decent small houses facing the New Cut, and draining backwards into the fields, which are very wet, and intersected by ditches. *Baynton’s-buildings*, near the turnpike-gate, was severely visited by cholera in 1849. The situation is open and airy, but the roads are unmade, and there are no back windows. A few houses have back premises, and there are several small and very dirty gardens. In the road are heaps of ashes. There are no footways, and the ground is occasionally under water. The natural fall is tolerable, but the general drainage is utterly neglected, and the meadows, in wet seasons, are saturated with water. The people here are very poor; their rents from 1s. to 2s. a-week; they are chiefly colliers. There are several pigsties, and at the back, is an open, filthy ditch, skirting the houses, and receiving the sewerage: 25 deaths from cholera occurred here.

The surveyor observes:—

“Baynton’s-buildings are built on a low and marshy piece of ground, having 46 houses and a brewery, with no sufficient drains for privies or sinks. I believe the drains not to be more than 6 or 8 inches square, emptying into an open pool or ditch adjoining the houses, where the cholera raged most fearfully a few months ago.”

210. Following the *Ashton-road*, are three very large scavengers’ depôts by the road side; the manure is for sale at almost any price at which people will fetch it, or from 6d. to 1s. per ton; it is disposed of principally to the tanners; Mr. Miles also takes a good deal. The highest of these depôts is at the first mile-stone, close to a group of cottages; it is much complained of as a serious nuisance. The cholera was bad here.

“There are,” observed Mr. Lucas, “in this parish, within the

borough, four scavengers' yards with large heaps of filth, refuse, &c. deposited in them, which are a great nuisance, and detrimental to the health of the inhabitants."

211. *North-street* is a very considerable thoroughfare. At *Luckwellside-gate*, an extensive tract of houses, without regular drains, discharge into ditches by the road side, and the refuse finally finds its way upon the meadows towards Ashton. Here are several new, and a few good houses, all without drainage. A little higher up the hill, near *North End-buildings*, the road is in cutting, and has a raised footpath, through the wall of which the house refuse discharges into the open road. *West-street* is thickly peopled, and was visited by the cholera. The turnpike road is, as usual, in bad order. Heaps of scrapings are collected at the sides, and in several places are temporary cesspools for house refuse, formed by banking up the scrapings. There is no house drainage. The natural fall is excellent. All sewerage and sanitary arrangements in this district seem to be quite neglected. North-east of Bedminster church, between it and the railway, on the Maligo-brook, is a recent and increasing *scavengers' depôt*, crossed by the church-path; here a number of pigs were roaming about. Near the church, is a parchment manufactory. *Mill-lane*, though very low has a good natural fall, which is not taken advantage of. The road is in a very dirty state indeed, and unmade. The footpaths are not paved, and sometimes are altogether wanting.

212. *Paul-street*. At the end of this street is a very dirty place. The waste water from the Maligo is led through a covered channel under some of the houses. The culvert has been opened, and is used as a public ash-pit, closing up the street. Close by, is a fellmonger's yard, on a marsh, part of which, at the time of my inspection, was under water. The cholera was prevalent in this quarter. The houses have been built from 10 to 20 years, but the roads remain in their natural state, not having been yet formed by the owner, or *taken to* by the parish. At the junction with Mill-lane, the Maligo turns a mill and is covered over. Windmill-hill slopes in this direction, but has no regular drainage. *East-street* is the main thoroughfare in Bedminster. Opposite to the junction with Mill-lane, and for a long way northwards, large mud banks are piled up, on one side, for the purpose of raising the road, which very much needs it, though not so much as the houses by its side.

213. At the *back of East-street*, on the south side, are a number of small gardens in low, wet soil. The cholera prevailed here, especially near *Seaker's-court* and *Margaret-place*. This road is liable, after heavy rains, to be occasionally flooded from the Maligo, to the depth of 1 foot or 18 inches, and sometimes, in high tides, 2 feet or more, requiring even the use of boats. There are several tan-yards here. Parallel to the road, and skirting the houses, runs the principal stream of the Maligo, about 8 feet broad, and very

deep ; it receives all the filth of this part of Bedminster, and is a flowing nuisance ; in summer, it is nearly dry, and very obnoxious. The cholera raged along its course. The people complain of the want of water. The houses are lower than the road. Near the *Rope-walk*, south of the *Paddock*, is a group of miserable houses, on low ground. Before the arrival of the cholera, this place was pointed out as one likely to be attacked ; a prediction which was amply fulfilled, seeing that here the cholera first broke out, and was particularly severe, so that it became necessary to remove the inhabitants. The houses have no backlets ; the ground behind them is higher than their floors, and the odour from a large tanyard is extremely offensive all around. These houses are also on the Maligo, the course of which is here very tortuous. On the opposite side of East-street, by *Bright Bow*, though recently much improved, is an open space, intersected by ditches, used as a deposit for all sorts of refuse, and occupied in part by market gardens ; upon it is a large fellmongery. It is difficult to imagine a more unhealthy neighbourhood than that on each side of this main thoroughfare of Bedminster.

214. Mr. Chamberlain, on being called upon for his opinion, states,—

“ I am the deputy-landlord of the place at Bedminster known as *The Paddock*, which you visited last week ; and my object is to place you in possession of such useful facts connected with that kind of property as have come to my knowledge. So far as choice goes, I should prefer breaking stones all day in a country road where I could breathe the pure air, to making a fortune by such property as the Paddock ; it is necessary, therefore, to say that I act for a widow, *who has no one else to act for her*. When I first took the Paddock and Bright Bow into my management, I found both places in a much worse condition than at present. In the Paddock cabbage garden, was an open cesspool of many feet circumference, really indescribable ; that, at a considerable expenditure of the widow’s money, I have covered over, and a large drain is made into the running brook. With only one or two exceptions, I found the tenants dirty, drunken people. I found horses, donkeys, and pigs, almost living with the family ; an ass, for instance, being regularly stabled in the back kitchen, and under one roof with the household ; rabbits, fowls, and ducks, actually in-door residents. I endeavoured, first by persuasion, to induce them to give up or remove these nuisances ; this had effect for a time ; then I tried money ; then threats of notice to quit ; finally, just when the cholera was daily expected in Bristol, but before it had actually broken out, I called on each tenant, told them the pestilence was approaching, pointed out the heaps of filth they insisted on accumulating near their houses, said distinctly ‘ if you neglect these things the cholera will punish you ;’ but it was all to no purpose, and now I feel certain that, except at a profuse expenditure of money, such as that property will not bear, or a *daily removal* of filth by scavengers, you cannot keep even the exteriors clean ; as to the interiors, a love of cleanliness to be instilled into the minds of the working-classes, and a feeling of self-respect, is all that will ever

succeed in effecting reform there. I have given it up in despair, after trying my best and kindest, and I now seldom visit the Paddock at all; never to collect the rents—I send my man. Having mentioned these matters, I will give you an account of the cholera visitation there, and the present sanitary condition of Bright Bow, Bedminster, and the Paddock.

The first cholera case was in the Paddock—a woman died, then her child also; under the bed on which she lay, was found putrid meat, bones, and maggots; the woman herself a drunkard, with husband twice in delirium tremens. Then died a man named Witnell, next door. Then a woman, Wilcox; two or three pigs just at front door. Burnall and son-in-law died; three feet off front door was a muck heap, of course; of which heap in particular I had repeatedly complained, and had it removed once or twice. Lawrence, and one or two more died; making altogether a fearful number. At Bright Bow, No. 1, died, man and boy, and an old man. No. 2, Hancock, father, mother, and two children; filthy people, very poor, yet rather well disposed. No. 3, one man. No. 4, one woman; sold fish, and kept pigs, which tainted the whole neighbourhood. Nos. 5, 6, 7, 8, 9, 10, all more or less clean; no pigs, no death. The present sanitary condition is this: *Bright Bow*—The houses were all painted inside and out, last autumn; the necessaries are at the bottom of the garden, and drain into the running brook; and there are quite enough windows in these houses. The *Paddock* is indeed bad, and all is *leasehold property*, with but one life remaining, and Lady Smith requires 1,000*l.* (!) for renewal; behind the houses, which are deficient in light and ventilation, runs a large necessary drain from the tan-yard, which is dreadful at times, and falls into a ditch at the last house, and there is no provision for carrying away the garble and dry filth. We have put in the Company's water at an expense greater, in my opinion, than we ought fairly to have gone to. I felt assured the cholera would visit the Paddock when it first spread west. I did the best I could with the limited means at my command. The result of my experience at the Paddock and Bright Bow is, that the only method of keeping down filth is by a perfect system of daily scavenging which shall carry the *broom and shovel close up to every poor man's door*—not to remove ashes only, as is generally the case, and by which contractors make money—but all filth of every kind."

215. These fields were formerly drained by a very large culvert, made by the Dock Company, it is said, for a temporary purpose, but now, by gross neglect, rendered quite useless. The condition of this culvert illustrates the inefficiency of the present system. All the parish authorities were present, and none of them could tell to whom the culvert belonged, or who was responsible for its efficiency, or by whose orders men were then engaged in blocking it up; and yet this culvert was the only outfall for a very considerable number of houses, and a large tract of very wet land. The houses towards Harford's Bridge drain from the river towards the Maligo.

216. The *courts about 'Still-house-lane* contain a dense population, in small houses, many of them placed close back to back, many without back premises, few with privies, and all very badly off for

water. The streets and ways are universally in a very filthy condition. The cholera raged here. Most of these houses have floors lower than the street, which has been raised by the filth thrown out from the houses. *Cinque-buildings* is an illustration of a very close court, in which the inhabitants have done their best to keep their houses clean. *Bedminster-place* is particularly close and crowded. The water from the cellars in *Boot-lane* is pumped up into the street. The groups of courts about *Sion-court* are very crowded, undrained, wet, and dirty, and all very badly off for water. There were great complaints of want of ash-bins. *Waters's-place* is very dirty, wet, and without drainage or water, although the Water Company's pipes run through it. Here is a public ash-pit, seldom emptied, and, when I saw it, piled up and much of its contents scattered about. At the back of *Brown's-row*, is *Brown's field*; another of those open, filthy spaces of which there are so many in Bedminster. It is undrained, and at the time of my visit was partially flooded. Scattered over it were heaps of household refuse, manure, ashes, and offal. It is crossed by an open ditch, much complained of. The cholera was very fatal in the neighbourhood, and this was almost the last place in which it lingered. Here also is a tan-yard, a public nuisance; 30 cases of cholera occurred here in four days, close to one of these ditches.

217. The roadway in *Spring-street* is very filthy and very low. Water stands in the cellars. A culvert has been laid here, but the house owners will not make use of it. On the *footway to Pyle-hill* between the houses and the railway cutting, is a tract of low, wet, and undrained land, used as market-garden grounds, and as a rope-walk. Towards the iron bridge, at the convexity of the river, the bank of the new cut has been carried away by the water, and the road very materially reduced in breadth. Pigsties attached to cottages are numerous, and a serious nuisance in this parish. Mr. H. Hodson states,—

“Numbers of pigs are kept in close neighbourhoods in a very filthy state. Should not the law prevent the keeping of pigs within the city at all, and would it not be advisable to make the landlords prevent it by some means?”

Messrs. J. Richards, M. Horner, and R. Jennings, living on *Windmill-hill*, complain of the filthy state of some of the houses on *Windmill-hill* :—

“There are from 8 to 12 houses having no drain whatever of any kind, to take off the nuisances from them. There are some houses there belonging to Mr. Phillips, the nuisances of which positively work up through the kitchen floor. In the summer-time, it is most offensive, and complaints have been made repeatedly about it; but still there is nothing done; many fatal cases of cholera occurred there last summer, and we, the inhabitants, fear what may be the fatal results of another summer. The medical men attributed the disease to the unwholesome state of the premises from want of drains.”

218. The inhabitants of Bedminster are well aware of the evils of the existing state of things, and very anxious to obtain a remedy. The complaints and memorials addressed to me during the inquiry were very numerous. From among them, I select parts of the following, from Mr. G. Grant, of Bedminster.

“As a parishioner, I beg leave to detail a few of the grievances of this parish, more particularly that part within the Borough of Bristol. These are—

“Numerous small houses, inhabited chiefly by mechanics and labourers, employed in the city, but who, when out of work, or in case of sickness, becoming chargeable on this parish.

“Bad roads, both highways and byeways.

“The greater part of the filth of the city hauled to two heaps, one in Dean-lane, and one in North-street, both within the borough.

“Ashes and rubbish of all kinds allowed to collect in the byeways, without the interference of the waywardens.

“A number of filthy ditches and cesspools, and, in general, the want of drainage. A gentleman has just informed me, that a tenant in a house of his, rented at above 30*l.* a-year, has declared his intention of immediately quitting it without giving the usual notice, in consequence of the stench arising from the ditch next his house, which his doctor says is very injurious to the health of himself and family.

“The poverty, and consequent high poor’s-rate of the parish, prevents persons of respectability from residing in it, which, of course, is a great injury to respectable property; and there are now, in the neighbourhood of the Coronation-road, about 15 houses of respectability void.

“The rates of the last year were as under:—

	<i>s.</i>	<i>d.</i>
“ Poor, 2 <i>s.</i> 6 <i>d.</i> and 2 <i>s.</i> 6 <i>d.</i> . . .	5	0
Borough, 6½ <i>d.</i> and 8 <i>d.</i> . . .	1	2½
Docks	0	4
High and Bye ways	0	6
	7	0½

being 1*s.* 4½*d.* in the pound above the local taxes within the old city, and without the benefits of good roads and paved walks, gas-light and scavengering.

“Ought not the parish to be incorporated with the old city for all parochial purposes, and share in their benefits, seeing that we are all so enormously taxed to support our labouring poor, as well as obliged to contribute to the general borough rate of the city and dock rates, with which we have no connexion?”

“Sincerely hoping that remedies will soon be applied, especially as to the foul ditches and other nuisances.”

219. Many of the cottage windows in Bedminster do not open at all, and others only partially. Ventilation generally is neglected: On this subject Mr. Hodson observes:—

“This most important point has been mostly neglected, although so easy. The modern houses have mostly sliding sashes; the lower one invariably hung, or sliding by some means; the top sash scarcely ever.

Consequently, the ventilation is of the worst description, by the bottom sash. Houses newly erected, and hereafter to be erected, should be provided with ceiling ventilation, passing from back to front between the joists."

The above account gives an unpleasant, but not, I think, by any means, an unfair, impression of Bedminster. In fact, it is difficult to convey in words, a correct impression of the condition of place in which the houses are, for the most part, low, ill-built and crowded together; a large portion of the inhabitants poor; in which there are very few sewers, and scarcely any house-drains, of which the more densely peopled parts are the lowest and worst drained; of which the turnpike-roads are in bad order, and the side-roads, and most of the streets have never been made or metalled at all; and which, to crown all, is miserably supplied with water and without any public lights at all.

220. The condition of the Bedminster Union, with its 20,000 inhabitants, and its 5,136 $\frac{1}{2}$ expended last year in out-door relief, is serious. It was the seat of severe cholera in 1832 and 1849, and is, at all times, the seat of less startling, but far more fatal epidemics, distinctly attributable, in great measure, to causes quite within the reach of an efficient local government to prevent.

221. WATER SUPPLY.—Until about two years ago, Bristol was worse supplied with water than any great city in England. Its ancient citizens, indeed, who built churches, and founded schools and charities, did not neglect to supply their city with this great necessary of life. In Redcliffe, Temple, St. Thomas, All Saints, St. John, on the Quay, and on the Back, are seven conduits fed by water from the springs outside the city, but led into it by pipes. Besides these the Cathedral premises, and a few other houses, were supplied by pipes, the property of the Dean and Chapter, laid from Jacob's well. About a hundred houses near Richmond-terrace Clifton, are supplied by an adjacent spring, and about 400 houses are, or very recently were, supplied by pipes laid from Sion spring, the water of which is pumped up by a steam-engine. These sources, and about a score of public pumps and wells, were utterly inadequate for the wants of a large and rapidly-increasing population. The Clifton supply was confined to the houses of the rich; the poor at all times had to fetch water, and in summer, from the scarcity of water in the higher and mountain limestone districts, many of them were forced to go for it to considerable distances. Water carrying was, and, indeed, still is, a common and lucrative trade, and the poor paid, and do still, in most cases, pay, from $\frac{1}{2}$ d to 1d. a bucket.

222. Bedminster is very badly supplied with water. Mr Hodson states,—

"*Spring water.*—Mostly bad in quality, and very short in summer. The writer of this has known parties fetch water full half a mile for

domestic uses. Many houses on Redcliffe-crescent, letting at 22*l.* to 26*l.* a-year, have no spring water.

“*Rain water.*—Most of the small houses have small cisterns, but not a good supply. Many of them have puncheons, but a great many catch what they can, any how.”

223. At the time of Sir H. de la Beche’s inquiry, about 5,000 persons in Bristol and Clifton were supplied with water by pipes from various sources, and above 70,000 were dependent upon pumps and wells, the waters of which are, for the most part, very hard.

224. Although steps have been taken, as will be pointed out, to apply a remedy, by far the greater part of the city still remains in the condition described in 1845. In Bedminster, the distress is at times very great. In the lower parts of Clifton, there are few wells, and many of them are affected by cesspools. Both in the higher and lower parts of the ‘District,’ and in St. Philip and Jacob, the want of water is universally complained of. In the lower levels, the wells are often mere pits in garden ground, the water of which is too filthy even for washing, and quite undrinkable. From the statements made to me from all quarters during the inquiry, I am disposed to agree with Sir H. de la Beche in the belief, that the 30,000 families, of which the city is composed, do, at present, pay, on an average, each, at least 1*d.* a day for water.

225. This amounts to 45,000*l.* per annum, which is equivalent to a rate of 2*s.* 8*d.* in the pound upon the rated rental of 373,000*l.*; a very heavy charge for a very miserable accommodation; but still not above one-fifth of what is spent in intoxicating drinks.

226. In the year 1846, a Company was incorporated for the supply of Bristol with water. The project met with severe and expensive opposition in Parliament, and during the execution of the works; but in 1847, a part of the supply was brought into the city, and while this Report is passing through the press, the whole is on the point of being laid on, and the projected works approach very nearly to their completion.

227. The directors afforded me an opportunity of inspecting the works in their company, and that of Mr. Simpson, their engineer, who, at my request, furnished me with the following statement. I am also indebted to Mr. Bragge, secretary to the Company, for information upon various points connected with its operations.

“Until the formation of the Bristol Water Works Company, the city was most inadequately supplied with that most essential necessary of life, water, which was chiefly obtained from private wells, and a few public conduits and pumps, many of which failed in dry seasons; and the system of supply was so objectionable, both as regarded the quantity and quality of the water obtained, that the question of a more abundant provision for domestic and other uses, became one of paramount importance to the city and neighbourhood.

“The wealthy district of Clifton no doubt enjoyed a more regular supply from the small water works at the Richmond, Sion, and Buck-

ingham springs ; but this supply was confined altogether to that locality, and the quality of the water was hard and objectionable.

"In 1845, the Society of Merchant Venturers of Bristol were engaged in the construction of works for affording an improved supply of water from springs at Black Rock, and other places on the Avon ; these works were, however, stopped during their progress on account of the society failing in their attempt to obtain an Act of Parliament during the same session in which the Bristol Water Works Company was incorporated. The works partly constructed by the Society of Merchants, were considered by the Committee of the House of Commons to be on too small a scale, and the supply of water from the springs to be so uncertain, that they gave their preference and sanction to the more comprehensive scheme of the present Company.

"After a severe and expensive parliamentary contest with the Society of Merchant Venturers, and certain proprietors and projectors of water works, mill proprietors, and land owners, the Company's Act of Parliament received the Royal assent on the 16th July, 1846. The district to be supplied as therein defined, was "the city and county of Bristol, and the parishes of Bedminster, in the county of Somerset, and St. George and Westbury-upon-Trym, in the county of Gloucester."

"The several sources which, on a preliminary survey of the country, appeared available as affording supplies of water, were as follows :—

The river Frome, near Iron Acton.

The river Avon, at Hanham.

The river Yeo, at Blagdon.

The springs at Barrow Gurney, Harptree-Combe Stream, and the springs forming the river Chew at Litton, and Chewton Mendip.

"After a careful investigation of these sources of supply, with reference to the quantity and quality of the waters, and their natural elevation above the city of Bristol, Mr. Simpson advised the having recourse to the three last sources, viz., the springs at Barrow Gurney and Harptree-Combe, and those forming the river Chew near Litton and Chewton ; the first being about 5 miles, and the last nearly 16 miles, distant from Bristol, as measured along the line which the nature of the country pointed out as the best for the direction and construction of the works.

"Various other places were examined, such as the springs at the Hot Well House, and at the mill opposite to it ; the stream at Hook's mill, and the rivers Boyd and Laden ; also the stream at Markham Bottom, the river Chew at Keynsham, and the waters in the direction of Long Ashton and Bourton.

"The objections to the Frome, at Iron Acton, as a source of supply, were, that in dry seasons there was frequently little or no water in the stream for weeks together ; the country was unfavourable for the construction of store reservoirs, and there was no hope of successful assistance from levels so low as those of the river Laden ; added to which, there was every probability that the colliery workings to the north would at some period, affect these rivers, many of the branches of which were fed from minor springs and streams flowing over extensive tracts of red clay and marl, and great difficulty and expense would be encountered in effectually separating the foul drainage of the villages and farms in this direction.

“From an analysis of the water of the river Avon, at Hanham, by Mr. Herapath, it appeared that it was the hardest of the samples submitted for examination; and looking at the drainage into this river, to its being the duct for the sewers of Bath, to its being identified with a navigation, to its low level, and to the fact that very frequently in dry seasons it was stagnant, and without any water flowing over the Weir at Hanham for many weeks together, it was evidently the least eligible of the sources proposed for the works.

“The river Yeo, at Blagdon, is a considerable stream in wet weather; in dry seasons, however, it does not yield 300,000 gallons per diem; it is only 87 feet above the Float, and the drainage from arable lands and red marl renders it quite unfit for water-works purposes. The river Boyd, the stream at Hook’s-mill, and the stream at Markham Bottom, are all at a low level, and the quantity of water in those places was found frequently to be so insignificant that it was evidently useless to have recourse to them. To the waters of the Chew at Keynsham, and the streams in the direction of Long Ashton and Bourton, there was the objection of foul drainages, and occasional extensive flows of water from arable land and red marl districts, which affected the waters most prejudicially even after slight showers; and in wet seasons, and during floods, they were found to be constantly in a most turbid state, and totally unfit for the supply of a town.

“The Winford brook also was examined, but it was found hopeless under the most favourable arrangement which could be applied, to anticipate that more than 1,000,000 gallons of water per diem would be obtained from it, including the springs at Barrow Gurney. Under these circumstances it was, that the Barrow Gurney and the Litton and Chewton Mendip springs, already mentioned, were selected.

“The water, from the springs at Barrow, was first conveyed to Bristol for distribution on the 1st October, 1847, and since that period, from 400,000 to 600,000 gallons daily have been supplied to various parts of the city and suburbs.

“The works for bringing the water from the more distant sources are now so near completion, that they will be in operation almost immediately. :

“Beginning at the most distant source of supply of the Bristol Water Works, and proceeding towards Bristol, the following description of the line of aqueduct will explain generally the nature and extent of the several works.

“The springs at Chewton and Litton are collected below the ground level by means of open-jointed drains or culverts; the water is then conveyed by the several branches to the principal aqueduct, which proceeds towards East Harptree, a length of about $2\frac{1}{2}$ miles, where it joins the tunnel driven through the high land above Harptree-court and village. The aqueduct is built of masonry, having an inclination towards Bristol of 5 feet per mile.

“The Harptree tunnel is about $1\frac{1}{2}$ mile in length, driven nearly all the way through hard magnesian limestone conglomerate, and the greater part is lined with masonry throughout, corresponding in form and size with the other portions of the aqueduct. The tunnel has likewise an inclination towards Bristol of 5 feet in the mile. Proceeding onwards from the tunnel, the line of works crosses Harptree-Combe, and is there

joined by a tributary aqueduct, conveying a considerable feeder from the springs and waters of the Combe into the main line.

“ The aqueduct is continued across the Combe or ravine by means of a wrought-iron tube, about 350 feet in length, supported, at intervals of 50 feet, on piers of masonry. The internal dimensions of the tube accord with the stone aqueduct, and the ends are connected therewith by means of stone-tanks and collars of clay puddling. The tube rests on cast-iron saddles, fixed to the piers and abutments, and provision is made in these saddles, by means of friction-balls, to allow of the tube expanding and contracting with the variation of temperature each way from the centre saddle, which rests on a pier of equilibrium. At a distance of about 250 yards beyond the iron tube, and near to West Harptree, the stone aqueduct is discontinued, and a line of cast-iron pipes, 30 inches in diameter, and $4\frac{1}{4}$ miles in length, is laid as an inverted syphon across the valley, near Compton Martin, (and nearly on the summit of the water-shed between the river Yeo, and the westerly branches of the Chew) and thence over Breach Hill to the tunnel through North Hill. The line of pipes undulates with the contour of the land, and has a total fall of $42\frac{1}{2}$ feet, so arranged, that the escape of the air from the pipes while they are being charged with water takes place at each extremity, and at a high point on Breach Hill, where there is an open upright pipe sufficiently elevated not to allow of any overflow of water; this pipe is contained within a stone obelisk 50 feet high.

“ The remainder of the line of works, from the 30-inch pipes to the store reservoir at Barrow, consists of a tunnel through North Hill, three-fourths of a mile in length; then, a length of stone aqueduct with two wrought-iron tubes across the valleys on Leigh Down and Winford, each 830 feet in length, and similar to that already described at Harptree Combe; and, lastly, the Winford Tunnel, 1 mile in length. It is a distinguishing and important feature of the Bristol Water Works, that the water for the city is conveyed direct from the springs, and the rivers and streams are left undisturbed as the natural watercourses or drains of the country.

“ The whole of the works, already described, are completed (with the exception of a small quantity of the stone lining, in the tunnels); making a total length of about 11 miles of aqueduct, tunnels, and tubes, from Chewton Mendip to the store reservoir at Barrow.

“ The springs at Chewton are at an elevation of upwards of 400 feet above the high-water line of the Float or docks at Bristol, and the waters are to be conveyed to the Barrow reservoir, and there stored at an elevation of 300 feet above the same level.

“ The necessity for a large store reservoir for securing an adequate supply of water for the city has been strongly urged by the Company's engineer from the commencement of the project; the fluctuation of the streams and springs in upland and hilly districts being so well known, that there was no hope that the proposed sources of supply for Bristol could prove an exception to the well known natural laws which govern such cases; and hence the necessity for a large receptacle to equalize the quantity, and prevent fluctuations from affecting the general supply of water requisite for the works. The site chosen for the intended store reservoir is peculiarly favourable; it is a hollow, formed by nature, and can be constructed with moderate embankments, and a comparatively

small extent of excavation, with plenty of clay and stone on the site for the construction of the works.

“The springs and streams are capable of yielding 4,000,000 of gallons per day for the supply of the city, and the works are constructed on a sufficient scale to convey a still larger quantity; while the demands of the city and suburbs, it is calculated, will not at present, exceed 2,000,000 of gallons per day; taking 20,000 houses, at 100 gallons per house per diem for all purposes, as the datum of the calculation, and the supplies to be afforded on the high pressure, constant service system.

“Thus, it will be seen that the undertaking is novel, and on a scale sufficiently large and comprehensive to meet more than double the present probable demands of the inhabitants; and from the well known abundance of water on the Mendip Hills, and the great facilities which the country affords of forming reservoirs near the line of aqueduct, it will not be difficult to increase the quantity of water in the event of such a necessity presenting itself at a future period.

“The works of the store reservoir, which is intended to be of the area of 25 acres, are commenced, but a provision has been made, by laying pipes from the aqueduct to the main, past the reservoir, to convey the water from the distant sources to Bristol during the construction of this important receptacle.

“From Barrow to Bristol, a distance of about 5 miles, there are two lines of main pipes laid down, respectively 20 inches, and 10 inches diameter; the former for conveying the Chewton and other waters, and the latter, the water from the Barrow springs, into and through the city.

“Three service reservoirs have been constructed for the purposes of ready and constant distribution of water over the district, and as local stores of water, in cases of fire and other emergencies. The first of these reservoirs is on Bedminster Down, for the supply of the Bedminster district and portions of the city south of Bristol bridge; the second, at White Ladies, near Clifton, for supplying all the lower portion of the city and suburbs; and the third, on Durdham Down, for the supply of the more elevated parts at Redland, Clifton, Cotham, Kingsdown, and adjacent places; this reservoir is at an elevation of 300 feet above the high water of the Float.

“The water is conveyed from Barrow (with a provision for filtering, at any time it should be found necessary) through the 20-inch main pipe into the reservoir at White Ladies, and the quantity required for the higher service is pumped from there by means of steam machinery into the reservoir on Durdham Down. Two engines are employed, each of 30 horses-power.

“About 56 miles of mains and service-pipes have already been completed and put in work in the streets, courts, and places throughout Bristol and the neighbourhood; and 10 miles of pipes in addition will be laid to complete the pipeage of the district.

“Three large compensation reservoirs have been constructed for the purpose of equalising the streams which supply mills on the river Chew and Winford Brook. Two of these reservoirs are near Sherborne, and the third near Chew Magna; the intention being to store the flood waters of the rivers and streams, and deliver out a fixed quantity, viz., 2 cubic feet per second, during 12 hours a day; thus rendering the

supply of the mills more constant and regular, and thereby fully compensating for the quantity of water abstracted for the supply of Bristol. The effect of these reservoirs has, indeed, already been to increase the minimum flow of the streams considerably, and render the mills more valuable.

“ To recur to the distribution of water; the number and description of houses supplied by the Company, on the 1st February 1850, are exhibited in a table given hereafter.

“ The capital of the Company is 350,000*l.*; the works comprise the culverts and collecting tanks at the springs, the entire line of aqueduct tunnels, tubes, and syphon-pipes, the store reservoir and filters, compensation and service reservoirs, and the mains, and service-pipes, in the city and neighbourhood. The Company have received numerous applications for supplies of water, which they have been unable to comply with owing to the quantity, at present, being limited to the yield of the *Barrow springs*; but as soon as the larger quantity is brought in from the Chewton springs and the other distant sources, it will be immediately conveyed to the city, and the services so extended, that in a short time the water will be distributed throughout the entire district.

“ Water is at present supplied to the shipping, and for brewing and manufacturing purposes; but the demand, in these cases likewise, has very far exceeded the present means of supply, and a proportionally large quantity of water will be applied to these purposes as soon as the works are in a more advanced state.

“ As the capital embarked in the Bristol Water Works is considerable it seems necessary to advert to the circumstances which have called for so large an outlay; these circumstances may be briefly stated as follows:—

“ The expenses of the opposition to the measure, and the Parliamentary contest.

“ The physical difficulties the country presents to the construction of water-works on a scale of sufficient magnitude for the supply of so large a city as Bristol, and the consequent unavoidably expensive character of some of the works.

“ The compensations paid to the Society of Merchant Venturers, and to the owners of existing water-works, for their plant and interests.

“ The obligations imposed on the Company by the Legislature to leave and apply sufficient water for the use and occupation of the lands adjoining the line of works, and for that purpose at their own expense to construct wells and watering places, channels and communications, and keep the same properly supplied with water for the benefit of the owners of such lands.

“ The money compensations, and the cost of the land for, and the construction of, large reservoirs for the protection of the mills on the river Chew and Winford Brook.

“ The additional expense of the line of aqueduct (as compared with the usual description of water-works for towns) from Chewton to the large store reservoir at Barrow, including the tunnels at Harptree, North Hill, and Winford, and the wrought-iron tube and piers for carrying the aqueduct across the ravine, at Harptree Combe, and the valleys at Leighdown and Winford.

“The bridge for carrying the mains over the New Cut, between Bedminster and Redcliffe, and the increased cost of laying the principal mains in the streets caused by various obstructions.

“The additional expense of the land for the line of works; the Company having been advised to purchase the same, in fee, instead of paying an annual rent for it, as at first contemplated.

“From a computation, founded on the actual outlay of the Company, it appears that nearly one-half the expenditure has been incurred under the above heads; consequently, that the cost of the works has been nearly double what it would have been under ordinary circumstances, with the sources of supply within a moderate distance of the city.

“It is confidently urged, however, that the prospects of the undertaking are most encouraging; the Company have secured large supplies of water at most commanding elevations; and notwithstanding the higher parts of the city and suburbs are 300 feet above the lower parts, they will be able to supply nine-tenths of the whole quantity of water by gravitation, and the remaining one-tenth only will be required to be raised by steam power to the elevation of 120 feet; consequently, the cost of distribution will be comparatively small, and the annual expense of carrying on the works will be relieved from what would have been a most severe burden if all the water had to be pumped from a low level.

“The demand for supplies of water in Bristol has exceeded the Company’s most sanguine expectations; there is no doubt the water rental will be much larger than was originally anticipated, and there is every reason to believe the shareholders will, ere long, receive a fair return for the money they have embarked in the concern.”

228. Mr. Simpson’s calculation of a daily supply of 4,000,000 gallons, is equivalent to about $28\frac{1}{2}$ gallons per head for a population of 140,000, or to one of 20 gallons for a population of 100,000.

229. With reference to the climate, at the sources of the springs, it appears from a comparison of the rain-gauge, maintained at the Company’s expense in the Chewton district, with the rain-gauges at the Philosophical Institution at Bristol, that the fall of rain, on the northern and eastern sides of the Mendip Hills, exceeds that at Bristol, upwards of 60 per cent.; and that when the annual fall of rain at Bristol is 35 inches, it will be about 56 inches in the elevated parts of the valley of the Chew river; and it has been observed that rain frequently occurs in this district when nothing of the kind is experienced in Bristol, and the country northwards of the city.

230. These are, I believe, the largest and most complete water-works by natural pressure, or very nearly so, up to this time constructed; and the manner in which the various engineering difficulties have been overcome affords a lesson worth the study of the hydraulic engineer.

231. The quality of this water, owing to the geological character of the district, is not so soft as could be desired, but it is considerably softer than the waters hitherto in use in the City,

and is much esteemed by the inhabitants for domestic use, washing, brewing, and other purposes. The following is Mr. Herapath's analysis of the Barrow waters.

REPORT on the CHEMICAL ANALYSIS of a Bottle of Water from Springs at Barrow.

Contents of an Imperial Pint of 8,750 Grains in Troy Grains and Decimal Parts.

Chloride of calcium (muriate of lime)	·196
Chloride magnesium (bittern)	none
Chloride sodium (common salt)	·415
Sulphate soda (Glauber's salt)	·087
Sulphate magnesia (Epsom salt)	trace
Sulphate lime (gypsum).	·306
Carbonate magnesia	none
Carbonate lime	1·312
Total salts	2,316

The following samples of the water were sent to Dr. Playfa for analysis.

No. 1. Barrow Spring	21·4° hardness.
No. 2. Harptree Combe	18·0° ,,
No. 3. Compensation Reservoir at Litton	19·0° ,,
No. 4. Watery Combe	18·0° ,,
No. 5. Chewton Springs	18·6° ,,

232. The tables of rates are given in Appendix C. For domestic use, for tenements of 5*l.* rental, the reduced charge is 4 per annum, or $\frac{1}{8}d.$ per week, and for 10*l.* houses, 10*s.* per annum or $2\frac{1}{8}d.$ per week. Notwithstanding the moderation of the charges,—

“The owners of such tenements have not as yet availed themselves of the water to any great extent, and, in some instances, where a supply has been taken under those terms, it is believed that the landlords have exacted profits, which has had the effect of repressing the laying of water in other places.”

Mr. Bragge further states,—

“The houses supplied on the 1st February 1850, are at the following water rentals :—

		Number.	Per Centage on the whole Number.
	Not exceeding 5 <i>s.</i>	104	1·5
Exceeding 5 <i>s.</i>	10 <i>s.</i>	355	6·3
„	10 <i>s.</i> „ 20 <i>s.</i>	822	18·3
„	20 <i>s.</i> „ 40 <i>s.</i>	995	} 33·0
„	40 <i>s.</i> „ 50 <i>s.</i>	324	
„	50 <i>s.</i> „ 60 <i>s.</i>	341	
„	60 <i>s.</i>	211	
Total		3,152	. . .

and are situate as under :—

	Number.	Per Centage on the whole Number.
In the parish of Bedminster	345	11·2
„ „ Clifton	971	38·7
„ „ Westbury-on-Trym	214	38·0
„ „ St. Philip and Jacob (Out)	171	4·0
„ district of St. James and St. Paul	161	12·3
„ various parishes comprised in the Old City	1,290	11·9
Total	3,152	. .

Whence it appears, that of the lowest houses in the city, those the inhabitants of which suffer most for want of water, but who are necessarily dependent upon their landlords for the outlay of from 10s. to 30s. for the charge of laying on the pipe and cock only 104, or 1·5 per cent. use the Company's water; and including a higher, though still a poor class, those at or under 10l. rental, the proportion taking the water is only 7·8 per cent.

233. These figures show, in a manner which does not admit of doubt, the indisposition of the owners of houses, at or under 10l. rental, to improve the condition of their tenants. In the present instance, one of the great necessities of life, and one of which the poor, after food, stand most in need, is offered, in a constant and unlimited supply, for less than a penny a-week some cottages, and but little above two-pence to others, and, yet, no advantage has been taken of the offer. Surely, these are cases in which compulsory powers are very much needed.

234. SEWERS.—The sewerage of the city is confined almost entirely to the old city, and to parts of Clifton. The other districts can scarcely be said to be sewered, and Bedminster is without any sewers at all. Some of the common sewers of the OLD CITY are of ancient date, and a large number of them have been laid above a century. By 6 Geo. III., cap. 34, power was given to the surveyors of parishes, under certain circumstances, to lay down, repair, or cleanse sewers, and to rate the tenements deriving benefit from their use. Of course, no general system could be carried out under a government so subdivided. The only point in common was the general direction of each sewer towards the Frome or Avon.

235. By 43 Geo. III., cap. 26, the whole of the old city was placed under the present Commissioners; and at the same time, or a little earlier, the Dock Company obtained the Act 43 Geo. III., cap. 140, by which the Avon was converted into a floating harbour; an arrangement which at once deranged the whole of the existing system of sewerage, inasmuch as it raised the outfall, permanently,

16 feet, or rather, as the water now stands, 17 feet 6 inches, and substituted stagnant water for a tidal stream.

236. The evil, thus created, was very partially remedied by the Dock Company. They laid the Bread-street sewer, to convey a part of the St. Philip and Jacob sewage into the New Cut, and a sewer from a part of St. Thomas and Temple parishes into the New Cut, east of Hills-bridge. They also laid another sewer in the Hotwell-road, opening into the river. The smaller drains still continued to discharge into the Avon and the Frome, and produced a nuisance so intolerable, that advantage was taken of Mylne's Culvert, made 1827-8, for other purposes, to convey a part of the Frome sewage into the New Cut. The Commissioners commenced their operations by a survey of the existing sewers, though in a very imperfect manner, and without any system of levels, or very close examination into their details of construction, dimensions, or state of repairs. They state, that they are responsible for 72,160 yards, or about 41 miles, of ancient, and, in many cases, small common sewers; and that they have also, between 1832 and 1850, executed 7,133 yards, or about four miles, of sewers of oval cross section, varying from 5 feet by 4 feet to 2 feet 4 inches by 1 foot 9 inches diameter.

237. With reference to the general construction of the sewers, the Commissioners state:—

“Some of them are square, with flat bottoms; others with flat bottoms, and arched over; others with invert bottoms, and arched over; others are made to an oval shape. The greatest portion are built with Hanham or Frenchay stone, set in mortar of best brown lime and ashes; a very small portion are built with Horfield limestone, also a small portion with stock bricks. Several miles have been made new within the last 18 years, and are in a good state, and at proper levels to receive the drains from the houses and discharge themselves.*

“The greater portion of the old sewers are in tolerable repair; but some of the small sewers, made apparently more than a century ago, are often out of repair.”

238. Appendix E^r contains a list of sewers constructed in 1848-9, by which the sewage of 1,132 houses is conveyed into the New Cut.

The tracts of low, flat land, included within the city, and the extreme complexity of its water-courses, have interposed unusual difficulties in the way of any complete system of drainage. Considerable attention has, however, been paid to the subject, and, from time to time, considerable sums of money have been laid out upon it, the general result of which has been, though not to produce by any means perfect drainage, yet, in some degree, to relieve the floating harbour from the sewerage of the city.

239. The course of the city sewers has been described to me by

* Not at all states of the tide.—G. T. C.

Mr. Armstrong, Mr. White, and Mr. Green, all of whom possess very considerable knowledge on the subject. I shall attempt, however, for present purposes, to give only a general view of what has been done. The Frome and the Avon, including under the latter term the ancient Avon, or floating harbour, and the present channel, or New Cut, receive, directly or indirectly, the whole of the drainage, natural and artificial, of the old city. The drainage of the whole of the extensive valley between Redland and Bristol, beyond White Ladies, and nearly to the Zoological Gardens, drains into a brook which is seen as an open and a filthy ditch at its junction with the Redland Brook, from Dugard's Wood, on the Gloucester-road, near the Avenue, and below Redland-court. At this point, it was thus complained of, in November last, to the Board of Guardians, and the complaint was repeated before me:—

“ We, the undersigned, William Edwards, of Redland-court, and Samuel Hughes, of Redland-green, inhabitants of the parish of Westbury-upon-Trym, do hereby give you notice that, to the best of our knowledge and belief, the water of a brook running from Cotham, across the lower lands of the Redland-court estate, is rendered filthy and unwholesome by reason, as we are informed, of drains from houses recently erected communicating with it; and we hereby require that you will cause such proceedings to be taken as are directed in this behalf by the Nuisances' Removal and Diseases' Prevention Act, 1848.”

240. Below the part thus described, the two streams, having united, are joined by a third from Horfield, which runs down the Gloucester-road, and receives the drainage of an adjacent line of new houses, from the inhabitants of which I have received the following memorial:—

“ We, the undersigned, occupiers of houses situated at Elton-terrace, in the parish of Horfield, within 100 yards of the borough of Bristol, respectfully beg leave to bring under the notice of the Board of Health a nuisance, now existing, of an open ditch which receives the filth and drainage of Elton-terrace, and also of Cotham; and it being of such an offensive nature that we crave your attention to the said nuisance.

“ Will. Jones, No. 11, Elton-terrace; Saml. R. Lloyd, No. 8, Elton-terrace; John Weatle, Elton-terrace; John Lawes, Lodway Cottage; Thos. Hale, Elton Villa; G. H. Sharp, No. 14, Elton-terrace; S. E. Taylor, Carlton Villa; F. C. Owen, Brook Cottage; S. D. Ditchett, Claremont Villa.”

241. The combined stream, passing the turnpike, reaches, in the state described above, Cutler's Mills, now a ruin, and receives much house drainage from Cheltenham-road. Below this, the channel is peculiarly filthy and irregular. Upon it, is a large dirty pool, at the back of Rennison's Bath, which it, until recently, supplied with water. Lower down, it receives the drainage of a somewhat thickly-peopled district about Picton-street, and then winds along a considerable extent of very low wet meadow-land, receiving the drainage of Montpellier. The following memorial by no means

overstates the existing evils, and shows the general impression of their extent and magnitude:—

“ We, the undersigned, rate-payers and inhabitants of that part of the city and borough of Bristol, residing in the out-parish of St. James and St. Paul, called the District, wish most respectfully to inform you of our local evil; that there is an open ditch passing through the whole parish, from Cutler’s Mills turnpike to Reunison’s Bath, under the bottom of Picton-street, along the back of Russell-place and Ashby-place, Upper and Lower Cheltenham-places, under the road at Sussex-place, across a field at Magdalen-terrace, and thence to Baptist Mills river.

“ This open ditch receives the discharge of sewers from the houses of Picton-street, Montpellier, Cheltenham-road, Kingsdown, and Cotham-road, as far as Redland out of the parish, &c., as well as the water from the street gratings, and smells dreadfully the whole year and, in dry and hot weather, the stench is insupportable, producing sickness, weakness, languor, and fevers, so that many have been ordered by their medical men to quit the neighbourhood in consequence and some have died through fevers from this ditch. Your petitioners have no means to remedy this great and public evil, which is under our windows and outside our walls, hovering its pestilential vapours over its stagnant waters, filling our rooms with its effluvia as it descends down the chimney with the dew at night. The Act of Parliament for the parish prevents any part of the rates being used to arch over this ditch, which is the only remedy; for when it has been flushed, in four hours after, it smells as bad as before.

“ Your petitioners pray that you will be pleased to devise those measures that will render a respectable part of the city, a healthy district.

“ *28th day of January, 1850.*

“ P.S. This ditch being the only division of some of the fields, a wall on the arch will be required at the same time to be provided for and included in its expense, as there are no hedges.

“ Joseph Harris, Samuel Grimes, R. W. Leonard, George Hill, Richd. Gazely, John Lawrence, Joseph Parker, Mary Parker, Francis Davey, John Webb, John Melhuish, John Vowles, Joseph Verinden, Henry Waldo, John Grace, John Farr, Nicholas Trengrouse, Lydia Zaehary, Catharine Store, George Stock, Fredk. Kingdom, Thos. Pearce, Wm. Hy. Wright, Wm. Wright.”

242. Near Sussex-place, this ditch receives the wash and overflow of Hook’s Mill, fed by a stream from near Stapleton, rising at the boiling well. A little below this, the brook flows into the Frome just above Baptist Mills, in a filthy state from having received a great quantity of house drainage. Its fall naturally is good throughout, but in its present neglected condition, its waters are, in places, stagnant, and are reputed, upon very strong evidence, to be the cause of continual sickness in their neighbourhood. The Frome enters the city at Combe Brook, tolerably free from sewage, and thus it reaches Baptist Mills, the lowest permanent

weir upon its course. From hence it traverses a very low and marshy district, where it is joined by a peculiarly filthy open ditch, which brings in the house drainage from Wilder and North-streets, and beyond Portland-square, and upon the course of which the ravages of the cholera were severe. Lower down, on the opposite or southern bank, the Frome receives, by two open and offensive ditches, the drainage from Frog Marsh, Thrissel-street, and Lawrence Hill, a thickly-peopled tract. These ditches may be seen on the Pennywell and Stapleton Roads.

243. The Frome then enters the most densely-peopled part of the city. It divides into two branches, running near together, and generally parallel. Of these, the southern feeds the Castle ditch, and communicates, checked by a weir, with the Float. The other, the old course of the river, winds through the city, partly arched over, until, at the stone bridge, it flows into the head of the Frome branch of the floating harbour. This channel is the receptacle of the whole of the sewage and refuse of the extensive and crowded district through which it passes, and the condition of its waters, and the effect upon the public health, is what might have been expected. Formerly, all this offensive matter was discharged into the floating harbour. At this time, gates are set up at the stone bridge, and a large sewer, known as Mylne's Culvert, has been led from thence along the narrow and broad quays beneath the Float, near Prince's-street Bridge, and across the island to a point between Bathurst Basin and the New Gaol, where it discharges into the New Cut. This sewer, which is of an oval figure, measuring 5 feet high, by 4 feet broad, receives along its course the drainage of the greater part of the Queen-square peninsula, and is besides, when the gates are closed, employed to carry off, in dry seasons, the whole of the waters of the Frome, then particularly filthy, and thus to remove a great cause of offence from the Float. As, in dry seasons, the Float level is above that of the Frome, hatches are then opened in the gates, and thus the circulation through Mylne's Culvert is materially aided, and the waters of that arm of the Float kept from becoming stagnant. Between the Castle ditch and the Stone Bridge, the bed of the river has been lowered, so as to allow, at all times, and especially, in dry seasons, the admission of water from the Avon through the Castle ditch, for the purpose of flushing this portion of the Frome through Mylne's Culvert. Independently of the facility of flushing, thus obtained, a most important object, this arrangement has likewise effected a great improvement in the general flow of the stream. The Frome has received various improvements at the hands of the late Mr. Green and Mr. White. At its lower part, it has been cleaned out, and its channel rendered uniform, and at Baptist Mill's Bridge somewhat straightened, and lined with masonry. Between these two points, however, the channel is most irregular, being, in parts, full of holes, which, in dry seasons, become mere open

cesspools. In other parts it is very shallow, and, at times, almost dry. The banks also, being unprotected, have been much injured by the water, and a public footpath along the river side has been carried away.

244. *The Feeder* leaves the Avon, as has been mentioned, above Neotham Dam. It receives a small quantity of house drainage along its course, chiefly from the district near the cotton manufactory and the marsh bridge, where it joins the floating harbour. The drainage of a considerable tract, as high as Lawrence and Barton hills, and the Dings, is drained by the Vain brook, a very filthy open ditch, which falls, charged with house-drainage, into the Float, at Cuckold's Pill. The rest of the sewerage from this side of the Avon, nearly as high as the Castle ditch, is intercepted by the Bread-street sewer, which runs along at a little distance from, but parallel to, the Float, crosses under the Marsh bridge, and discharges into the New Cut, just above Cracroft's Lock. The fall of this culvert is said to be pretty good, but it is out of repair, and in parts ruinous. A small quantity of house drainage is contributed to the Float by the Castle ditch, and other small sewers enter it along the Back, and near the Grove towards Queen-square.

245. The southern, or Temple side, contributes numerous sewers to the Float, but recently, arrangements have been made to lead the greater part of this sewerage into the New Cut, by means of a driftway through the new red sandstone of Redcliffe-hill.

246. The Frome branch of the Float is protected from the sewage, on its east side, by Mylne's culvert, already noticed. On the west, it receives the whole of the drainage of the Cathedral district, including Park-street, Park-row, and the densely peopled districts beneath. The cottages under Brandou-hill also drain into the Float; but much of the drainage of Clifton is intercepted by a culvert, which runs along the Hotwell-road, and falls into the Avon near Rownham Ferry.

247. The following is the Commissioners' account of these outfalls. In it, the sewers discharging into the Frome and Float, scarcely, I think, occupy a sufficiently prominent place.

"The sewers have various exits according to their locality, viz.,—

"Into the River Frome, above the stone bridge.

"Into the floating harbour, on the north-west side, from below the stone bridge to the east end of the Hotwell-road, and a small portion on the north side, from Princees-street bridge to the Castle Pill.

"Also a few, on the south side, from Redcliffe Parade to near the east end of the Commercial-road, Temple baeks.

"A great many, in the centre of the city, into Mylne's culvert, and thence to the tidal river below Bathurst Outer Lock.

"Several, in the parishes of Redcliffe and St. Thomas, into the tidal river, from Bathurst Basin Lock to near Hill's-bridge.

"Also from Temple parish into the tidal river, from the lower side of Hill's-bridge to opposite the cattle market.

“Likewise, from a part of the south side of the parish of St. Phillip and Jacob, into the sewer from Castle Pill, and thence into the tidal river above Totterdown Lock.”

248. *New Cut.*—This channel receives little or no house drainage above Calcraft Loek, where, as already noticed, it is joined by the opening of the Bread-street sewer. From hence to Harford’s bridge, it receives various small drains on each side, most of which enter it considerably above low-water mark, and besides injuring the banks, are productive, in hot weather, of a nuisance much complained of, and which has been increased, by the practice of throwing over the bank quantities of ashes and house refuse. Near, and below Harford’s-bridge, the Redcliffe culvert enters on the north bank, as does Mylne’s culvert, already noticed. On the south bank, enter various drains and three streamlets, one of which, the Bedminster Brook, brings down a considerable quantity of water. Near the sluices, between them and Cumberland basin, where the houses are subject to be flooded, the drainage is very deficient; but such as there is, passes into the Float. Outside the dock-gates, several culverts open in the quay wall, and discharge much house sewerage upon the spot frequently occupied by steam-boats; and lower down, from Rownham Ferry to the Hotwell-house, the bank of the river is in a most filthy state from drain-mouths, ash-heaps, offal, and other refuse, the effect of which is at all times perceptible, and, in hot weather, such as to prevent the inhabitants from using the promenade.

249. One great defect in principle pervades the whole of these sewerage arrangements, and is fatal to any general improvement; the water from the upper levels is allowed to drain into the lower levels, instead of being conveyed independently to its outlets; the consequence of which is, that the lower parts of the city, already swampy, and covered with houses inhabited by a class of persons peculiarly obnoxious to disease, are charged with a quantity of water and sewage, in addition to their own share, and are converted into regular fever districts.

250. Credit is due to the Commissioners, and to their able surveyor, Mr. Armstrong, for the sewers they have laid down during the last few years, and their operations appear to have been conducted with economy and skill; but they have not, and with their present limited powers and jurisdiction, could not, grapple with the question, or work to an extended plan, without reference to artificial boundaries.

251. The old city is better provided than common with house drains, though scarcely with house drainage. Appendix F shows 725 houses out of 750, in front of which sewers pass, to be provided with house drains, such as they are.

252. It appears that when the City Commissioners construct a new sewer, they have no power to call upon the owners of such houses as drained into the old sewer to incur the expense of entering

the new one, nor do they feel justified in completing such junctions at the public expense. The consequence of this is, that the old sewer is only partially superseded by the new one, and as each new junction is from time to time made, the ground has to be opened from the house to the sewer, at a serious public inconvenience, and an increased expense to the house owners, of about 15 per cent. Also, the new sewer being usually made by reason of the want of depth, or general inefficiency of the old one, those who do go to the expense of using it, are still liable to the exudations and effluvia from the premises and drains of their neighbours who do not.

253. The extent of this evil is shown by the annexed return from the Commissioners, (Appendix D.), from which it appears, that out of 35 new sewers made in the last 13 years, in front of 882 houses junctions have been made from only 294 houses, or 32·8 per cent of the whole. This system works very ill, and has tended, almost beyond any other defect, to produce the existing state of house drainage, and the general dissatisfaction with the sewer rate.

254. The out parish of ST. PHILIP AND JACOB is very partially sewered. "Its water-courses," says Mr. Slade, "have now become common sewers, and are generally in an offensive state." Its northern drainage falls naturally into the Frome; its southern from a line near Lawrence-hill, into the Avon. There is no plan and no paid surveyor, and Mr. Slade, Chairman of the Highway Board, states, "that the Board was advised, in 1836, that it would not be justified in expending money, raised for the repair of the highways, in constructing sewers; and therefore, those only have been kept in order which received water from the roads; and consequently, this Board is not possessed of any practical knowledge of the cost of making sewers, nor has it any plan showing the sewers."

255. This statement does not promise much for the sewerage of the district. On the northern side, however, there are sewers in most of the main streets, into which house drains are led, from the back premises, beneath the houses. These sewers do not appear to have been laid after any system, or to be in good repair. The house drains are generally defective, and give out offensive smells. On the southern side, there are but very few sewers, and the houses drain either into cesspools, or into open ditches. Mr. Slade furnished me with as complete an account as he could obtain of the sewers of this district: I subjoin his statement, in order to put on record information not before collected, and which will be a guide in the event of any general measure being carried out.

"The following are all the sewers passing through any part of the streets in the parish, which are known to the Board.

"A culvert, known as the 'Bread-street sewer,' which enters into the parish at Passage-street, and passes under the upper part of Cheese-lane, Bread-street, part of Upper Cheese-lane and Avon-street, an

After being carried under the New Cut, or Feeder, empties itself into the old bed of the River Avon, behind Messrs. Hare's factory in the marsh. This culvert was constructed under the provisions of the Doek Act, to prevent the sewerage of the parish, as well as part of that from the old city, being discharged into the floating harbour. It is supposed that the duty of keeping this culvert in repair devolves upon the Corporation, as representatives of the Doek Company.

"The following sewers empty themselves into the last-mentioned culvert:—

"One under Unity-street, and the broad and narrow plain.

"One under part of Cheese-lane.

"One under part of Upper Cheese-lane.

"And three others, nearly constructed by the owners of the property interested, viz.:—

"One from Russ-steet, at the bottom of Bread-street.

"One from the railway arch in Tyler's-fields under Oxford-road, to the railway arch in Avon-street, and

"One from the steam-engine beer-house near the Gas-works.

"Under West-street, there are three sewers:—

"One, at the upper end, which passes through Butchers'-row, and at the back of the houses on the west side of New-street, into the Frome.

"One, on the north side, which empties itself into the sewer in Trinity Churchyard, and

"One, on the south side, which, after passing through Clarence-road, meets a sewer from Lawrence-hill, and crossing the road above the turnpike, passes into Trinity Churchyard.

"The sewer from Lawrence-hill is continued from the viaduct at the top of the road.

"A sewer, commencing at the lead-works, Easton-road, passes down Easton-road, and joins the above sewers before it enters the churchyard.

"The first-named sewer, in West-street, is supposed to be a good one; but all the others were originally only surface-drains; the sewerage from the adjoining houses having, from time to time, been carried into them, and alterations made in them in consequence.

"The sewer in Trinity Churchyard, into which the above sewers are conducted, passes from the churchyard down the New-road, and under part of Stapleton-road, into an open watercourse, over land belonging to the devisees of Samuel Goodhind; which watercourse passes under Pennywell-road, and along lands belonging to a Mrs. Anne Simmons and others, into the river Frome.

"Into the above sewer, before it passes into the said watercourse, there is conducted sewers from the following streets, &c.:—

"One under Stapleton-road, from the 'Waggon and Horses.'

"One under Thrissell-street.

"One under the Paddock.

"One under Sion-road, and

"One under Waterloo-place.

"There are also sewers under the following streets, supposed to have been made, when they were first laid out for building, viz.,

“ Eugene-street,

Wade-street,

“ New-street,

Lamb-street,

“ Great and Little George-street, and Great and Little Anne-street

“ These all empty themselves into the Frome.

“ At Barton-hill, the owner of some land let on building-leases has lately constructed a sewer from Church-street to the Feeder.

“ There is an ancient watereourse which enters this parish, from the parish of St. George, at the top of Lawrence-hill, and discharges itself into the floating harbour, towards the bottom of Avon-street. Numerous houses have been built, within the last 40 years, near this watereourse, and the sewerage from them carried into it, so as, for a considerable portion of its course, to render it a most serious nuisance. It passes through Messrs. Stothert and Co.’s Iron-works, and Messrs. Hewitt and Co.’s Coal-yard; but in both of these places it has been covered over.”

This has been already noticed in this Report as The Vain Brook.

“ There is also another watereourse which enters this parish from the parish of St. George, near the Lebeck public-house, Stapleton-road, which, after passing through land belonging to John N. Sanders, Esq. and others, and going under Pennywell-road, discharges itself into the Frome; no sewerage enters into this watereourse from this parish, except that from the houses in Victoria-street, but it receives the sewerage from numerous houses in the parish of St. George.”

256. The DISTRICT is very imperfectly sewered. The natural fall is almost everywhere excellent. The exceptions are about the junction of the Cutler’s Mills brook with the Frome, and the bank of that river. It does not appear that any regular level of the ground have ever been taken, or any system of sewerage planned, by which such works as were from time to time executed could be laid down. The consequences of this defect are felt throughout. The public sewers vested in the Commissioners are described in the following list furnished to me by Mr. Hare, the clerk:—

“ A sewer from Kingsdown, commencing at Mr. Livett’s, Frome-mantle-square, which runs down Ninetree-hill, into the city sewer in Stokes Croft.

“ A sewer from Ninetree-hill-fields, commencing at Mr. Hueckel’s houses, and running down Bath-buildings into the Law-ditch, running from Baptist Mills into the Frome.

“ A sewer, at back of Wellington-place, running into the Law-ditch through the garden of house occupied by Commissioners.

“ A sewer from the end of Upper-road, Montpelier, running into the Law-ditch, at the bottom of Pieton-street.

“ A sewer from York-road, commencing at Mr. Boardman’s-house, and running into the Law-ditch, through Mr. Woodman’s garden at the bottom of York-road.

“ A sewer from Mr. Townsend’s-field, which runs down Hillgrove street into the city sewer in Stokes Croft.

“A sewer down Spring-hill, commencing at Somerset-street, running into the city sewer in Stokes Croft.

“A sewer down Thomas-street, running into the city sewer in Stokes Croft.

“A sewer along Upper Cheltenham-place, commencing at Mr. Townley's house in York-road, running into the sewer, which commences at Waterloo-place, and emptying itself into the Law-ditch.

“A sewer in Lower Cheltenham-place running into the Law-ditch.

“A sewer in Picton-street running into the Law-ditch.

“A sewer in Picton-lane.

“A sewer in Holton-street running into the Frome; and

“Many other small sewers running into the Law-ditch.”

257. I have not received the particulars of these sewers. There is no public record of their levels, dimension, figure, materials, or depth beneath the surface; nor is there any official plan showing their course. I learnt by inspection, that by far the greater part of the district is not drained at all; that the lowest parts have not even surface gutters, and that in the higher parts, where the sewers are most frequent, very many of the houses do not join them, but are drained into cesspools, the contents of which are, in many cases, pumped out into the road drain or the open gutter. The levels near the Frome are not naturally good, and no care whatever has been taken to improve them. Some few persons have made private drains. Mr. E. H. Townsend, who owns property here, has done so at a considerable expense, which, under any well-arranged system, would have been divided over the whole drainage area. The particulars of Mr. Townsend's expenditure are recorded in another part of this Report, and contrasted with what they would have been under a general system. With reference to the general drainage of Kingsdown, Mr. Townsend speaks as follows:—

“I beg to call your attention, while here, to the state of the drainage on Kingsdown, which, from its elevated position is considered, and reported to, as one of our healthiest localities. Yet the want of proper drainage is such, that the residences, for the most part, are, at times, in most offensive state; and with the exception of a drain I have recently made, I am not aware of there being any leading drain of any importance near the spot in question: cesspools are universally in use within a few yards, in most cases, of the living apartments.”

258. Mr. Herniman, one of the churchwardens of St. Nicholas, and living at Spring-hill House, gives the following account of his neighbourhood:—

“As owner of two houses, Nos. 7 and 8, Portland-street, Kingsdown, opposite Portland Chapel, I beg to call your particular attention to the following facts:—

“No drainage through the whole street, nothing but cesspools; the one behind my house is now quite full, and will take four nights to empty it; part of my tenants are obliged to leave the neighbourhood while it is being removed, from the dreadfully offensive smell. This cesspool is within four yards of a well of water that supplies about 20

houses. As soon as it is closed up, another cesspool must be opened adjoining, belonging to some houses in Portland-court; and so we go on from one nuisance to another. I am sorry to say we have no lighting, cleansing, pitching, or paving, and yet are within ten minutes' walk of the Exchange: I hope that something may be done, ere long, to remove this intolerable nuisance."

259. I have received numerous complaints pointing out the manner in which house property is affected by the want of an efficient public sewerage, and from among them I select the following. Mr. W. Randle, of Cheltenham Cottage:—

"I beg to state the condition of the house I occupy. The common privy may be said to be in the kitchen of the house, as it is within two feet of its back door, in a narrow arched passage, and nearly opposite such door. The drainage of the privy runs under the kitchen and parlour, continued therefrom under the garden, emptying itself into a ditch running below from Rennison's Bath, through Baptist Mills, and emptying itself into the Frome. As numerous privies empty themselves into the ditch, it is, in warm dry weather, very offensive in smell. At the period of cholera existing, ejects were placed at the ends of the sewers, the ditch end, which has tended to impede my privy free cleansing itself, and renders the offensive smell almost continuous. For several months (rats having disturbed, or rather, torn down the earthen underneath the flooring of one room) the effluvia was so intolerable arising from the sewer under, that it was almost impossible to remain in the house, and this the more especially by night. There is a pump at the back of Cheltenham-place, from which, not only the occupants of this place, but persons from other places round the neighbourhood, are supplied."

260. The following statement has been selected as an illustration of the difficulties thrown in the way of any great extension of the sewers, from the want of powers to compel unreasonable persons to lay down house-drains, or in case of their refusal or incapacity from poverty, to execute the work, and charge it upon the property:—

"Clarence-place, Kingsdown, contains a rank of 22 houses on one side, and 11 houses on the other side, besides two courts, called Clarendon row and Wilmott's-court. The first two houses only, and a small portion of the third, are in the ancient city of Bristol; the others are in the parish of Westbury-upon-Trym, in the county of Gloucester. The drains from the 22 houses emptied themselves into a cesspool which had been formed just within the boundaries of the ancient city, and when this was full, the sewage, of course, became very offensive. In the autumn of 1849, an agreement was entered into between the Sewer Commissioners of Bristol and the landlords of the houses in Clarence-place, that if the latter would contribute 100*l.* the Commissioners would make a new sewer from Clarence-place, along Highbury-place, to communicate with one, already existing, on St. Michael's-hill; that the cesspool, as above, should be destroyed, and the Clarence-place drains connected with the new sewer, to be made along Highbury-place. The landlords of Clarence-place raised the 100*l.*, and the sewer was made

The landlord of eight houses in a court, called Clarence-row, whose drains emptied themselves into a cesspool, agreed to give 10*l.* as his share ; but when the Sewerage Commissioners had made the sewer, he objected to pay, and still does object ; and when his cesspool is full, he pumps it out into Clarence-place, when an odour arises sufficient to poison even a manufacturer of catgut."

261. CLIFTON presents a remarkable example of a large, wealthy, and important watering place, the suburb of a great city, possessing everywhere a good natural fall, but without any system of public sewerage. I was accompanied in this part of the inquiry by Mr. W. B. Reed, by whom many of the private sewers have been constructed, and who has laid before me an account of the Clifton sewers.

262. There are three principal public sewers, most of the branches of which are private property. The first belongs to Mr. Tyndall, of "the Fort," who states:—

"It commences near West Park, from whence it runs parallel with the White Ladies' turnpike-road for a distance of nearly 600 yards, and is carried into the public drain below Park-place. The sewer is egg-shaped, 3 feet deep, by 2 feet 6 wide, and there is a regular fall of three-fourths of an inch in 10 feet."

"This culvert," says Mr. Reed, "might be made available for the White Ladies-road, from its starting point to where it joins Park-place, embracing a large tract." A second branch drains Chesterfield-place, and joins the trunk at Park-place. Mr. Reed observes:—

"It is equal to the draining of a large mass of houses, right and left, of Gallows Acre-lane (now called Durdham Down-road), and property about the Victoria rooms, part of Richmond-hill, Buckingham-place, &c. It was built at the cost of Mr. Barnett, who fairly calculated upon some return from his neighbours who might wish to use it ; but this is the subject of dispute, from its running principally under and through the public roads, which it is assumed might be broached and used without charge. This is one of the many evils existing from the absence of one united power for such matters."

A third branch, well formed and lately made, drains Meridian-place, and passing the Roman Catholic chapel, reaches Park-place.

"This," says Mr. Reed, "might serve a large neighbourhood, including York-place, Tottenham-place, Hanover-place, Grosvenor-place, part of Richmond-terrace, Wetherell-place, and many villas, and part of Richmond-hill. It is, in part, private."

A square drain descends from Clifton Church, by Clifton Hill, Jacob's Well.

"It is very little used, but might be made a most serviceable drain to such good property. It joins the sewer running from Park-place to the boat."

The main trunk drains Berkeley-place, descends the Woodwell-

lane by Jacob's Well, and discharges into the Float behind the Hotwell-road; a most objectionable outfall, as it renders the water foul to a considerable extent, and this along the margin of a damp poor, and densely-peopled neighbourhood.

263. Another main sewer drains Victoria-place, and descends to Clifton vale. With respect to its upper part, Mr. Reed states:—

“A sewer has been formed, within the last four years, encircling Victoria-square, every house having a good connecting drain, including Lansdown-place, which previously stood upon cesspools. This sewer is of the most approved construction, of oval figure, 3 ft. 6 in. 2 ft. 6 in. in brickwork. It passes chiefly through compact limestone rock, and cost from 20s. to 65s. per lineal yard; it is excellently flushed by a perpetual stream from the fountains and fish-ponds. It runs underground through gardens adjoining Saville-place, and under the main road to Clifton Vale, where it joins the public sewer. This is of square form, and of smaller dimensions, but has a very rapid fall down Clifton Vale through Charles-place. The outfall is just outside the Cumberland Lock gate into the tidal river, at about half-tide level. This sewer is capable of relieving Boyce's-buildings, Saville-place, Clifton-court, and the buildings surrounding the church, Clifton-place, part of Richmond-terrace and Carlton-place, Kensington-place, and vicinity. It is the property of the Society of Merchants, and open to the public upon very liberal terms. This great accommodation is quite overlooked by the adjoining property, which stands much in need of it. Nothing short of compulsory powers will effect a change, or secure a fair return of interest to the parties on such praiseworthy outlay.”

This sewer receives another tributary—

“From the front of Rodney-place, but not used by it, continuing down Regent-place, which it drains, and joins the public sewer in Clifton Vale. This might serve part of York Crescent, Nelson-place, and many premises in its line. It is called Mr. Carter's sewer, having been made at his sole cost. It is offered to the public.”

Next in succession is—

“A sewer from Cornwallis-crescent, passing the Polygon, Green-street, and Gloster Hotel, to Jones's Dock. It is in a bad state, and partly unused. Connected with it, is a branch from Hope-square, Albemarle, and Dowry-square. Dowry-parade and Love-street drain into the sewer running down Charles-place and Caroline-row, the outfall of which is near the outside of the Dock gates. This sewer is much too flat, and frequently bursting, and often requiring to be cleansed.”

Near this, though a little lower down the Avon, is a sewer connected with the Paragon and Windsor-terrace. Mr. Reed states:—

“This last place has also a separate drain, direct to the river, running down Granby-hill, receiving house-drains on its way, and emptying into the Avon near the Ferry at high water mark. It is exceedingly unsatisfactory. It is old, and its condition bad. There are some six or seven small drains entering the river at the same level, between the Ferry and Vincent-parade, all in a most disgusting state, of long standing, serious

damaging the adjoining property, in close proximity to the landing places of the steam-boats, and a lamentable eyesore to all passing by land or water. This spot, for less than 500*l.*, could be made an excellent continuous landing and promenade. An estimate was given of 150*l.* to form a lateral drain or sewer to intercept all those drains, with a main to low water mark. The Society of Merchants, who have no direct interest in it, offered half the amount; but no one could be found to cooperate with them."

264. These appear to be the whole of the sewers of which any portion is public. The effects of their ill-arranged outfalls are set forth in the following memorial:—

"We, the undersigned owners and occupiers of houses in that part of the parish of Clifton, contiguous to the River Avon, beg to call your attention to the state of the sewerage, from Rownham Ferry to the Hotwell House. Along the whole of this line, the sewerage is affected by a number of small drains, discharging their contents into the river, immediately under the level of the roadway, in consequence of which the stench arising therefrom, particularly during the summer months, is of the most offensive description, highly prejudicial to health, and is sensibly felt to a considerable distance from the river. We further beg to direct your attention to the state of the bank between Rownham Ferry and St. Vincent's Parade, which, as there is no river wall to protect it, is gradually being washed away by the action of the numerous steam vessels engaged in the trade of the port.

"We, therefore, pray that you will take the necessary steps to have the above matter inquired into, in order that the nuisance complained of may be abated, and that this part of the river's bank may become once a healthful place of residence, and an agreeable promenade.

"James Powell, Esq., St. Vincent's Parade; W. W. Brock, M.D., 5, St. Vincent's Parade; Henry Abbot, Esq., 9, St. Vincent's Parade; Elizabeth Sweet, 5, Draper-row; James Gage, 6, Draper-row; George Down, 4, Charlton-place; Francis Evans, Freeland-place; Elizabeth Pearce, 7, Charlton-place; John Dunn, 18, Freeland-place; Joseph Rogers, 2, Draper-row; William Milner, Esq., 3, Charlton-place; William Harris, 10, Ashton-place; John Owens, Draper-row; Edward Boucher, Draper-row; Mrs. Mirehouse, Ashton-place; Samuel Cryer, 9, Ashton-place; William Williams, 6, Charlton-place; Robert Handford, Rownham-place; George Mahon, 1, Rownham-place; Walter Pemberton, 1, Rownham Parade; Richd. Pike, 5, Rownham-place; Wm. White, Ashton-place; S. Vowles, 3, Ashton-place; Geo. Price, 7, Ashton-place; Robert Pike, 12, Ashton-place; George Wonnacott, Rownham; John Parratt, Rownham; Thomas Williams, Charlton-place; Fredk. White, Freeland-place; Thos. Bayntun, Ashton-place; Benjamin Richard, St. Vincent's Parade; James Wright, Hibernian Hotel; W. Jones, Esq., Dial House."

265. The condition of the Hotwell-road has already been described; much of its worst features are due to want of proper drains. Mr. B. T. Burbidge states on this point:—

“ A great portion of my property lies in the Hotwell-road, the occupants of which can all testify with myself, to the very inefficient drainage there, for the want of a good common sewer in the main road ; all I can do, about every other year, is to have the sewers opened and cleaned out which is a very great expense, besides the sad nuisance attending it. I am fully convinced that a better drainage, coupled with the intended improvement of the Hotwell-road, will be very conducive to the healthiness of the place.”

This Hotwell-road, from Canon's Marsh to Rownham Ferry, is one string of nuisances. It is very low ; too low to drain freely at all states of the tide ; but, nevertheless, it is loaded with the water and sewage from the upper levels, in addition to its own. The following is a very faithful account of this strip of low land :—

“ The points to which I wished to draw your attention, this morning were the drains around, and the state of Canon's Marsh and neighbourhood. The main sewer, which empties immediately below the Cliff Gas Works, the sewer and drains along the Hotwell-road, and the sewers and drains from houses in Grenville-place, Caroline-row, Gloucester-place, to Rownham Hill, and Rownham Ferry, Western-square, and the houses round Cumberland Basin.

“ Canon's Marsh is, during the winter, a complete bog, and is partly used as a scavenger's yard and piggeries, and forms a surface drain for the yards, premises, &c., adjoining. At the head of this marsh, a common sewer, leading from Lower College-street, Trinity-street, Anchor-lane, and the neighbourhood of the College, which connects itself with the sewer which delivers below the Gas-works ; this sewer has no regular fall or inclination, and frequently overflows, and runs back into the surface drains in Canon's Marsh. A general, or main sewer, is supposed to run from Jacob's Well through the Hotwell-road to the Rownham Ferry ; but little or none of the sewerage of the district adjoining, excepting from the houses in the Hotwell-road, is conveyed into that sewer, the principal portion falling into cesspools, or into the Float, by what may be termed surface drains. The drains or sewers from the houses in Grenville-place, Caroline-row, Brunswick-place, Caroline-place, and the cottages, courts, &c., behind, all deliver themselves into what is termed a sewer leading into the Hotwell-road sewer ; but, for its want of delivery, it forms a mere cesspool for the whole of the district immediately adjoining, and for Western-square, and the houses round Cumberland Basin. During many months of the year, the effluents arising from this cesspool renders many of the houses almost uninhabitable even to the upper stories. In fact, the whole distance and distance from Jacob's Well to Rownham Ferry may be considered as having no sewers, but a continuous cesspool.”

266. The private sewers are more numerous, and of a more better description. Of these, Mr. Reed has forwarded to me a detailed account, with their courses shown upon the general map attached to this Report :—

“ There is a square drain from Sion-row from about six houses, running under the Zig-zag walk, and discharging into the river, at high water level, a little below the Hotwell House. The fall, as may be supposed

from the situation, is immense. It is in middling repair. Near the towing-path, a trunk is built on the face of the rock, which occasionally weeps, and is, consequently, offensive; but this might easily be remedied, and this sewer would drain all Sion-row. The cost of this sewer must have been small; probably not more than 5s. per lineal yard. It is about 200 yards in length; this also was formed by private means; it receives the road drainage.

“The Mall, West Mall, Mall-place, part of Portland-place, Bath Hotel, and Caledonia-place, are drained by a sewer passing by Sion Spring to the west end of Prince’s-buildings. It is of good form and materials, with ample current, and is connected with a sewer running down the back of Prince’s-buildings as far as No. 5 in that row; whence, continuing through gardens of great declivity, it passes near the end of St. Vincent’s Parade, and enters the river at low water mark.

“A branch of this sewer runs from the back of the Mall Hotel, passes through Waterloo-place, across Nelson-place, and the Mall stables, and in front of the Royal York Crescent, joining the last sewer opposite to No. 5, Prince’s-buildings. This is of excellent construction. It is used by the hotel, a few houses in Waterloo-place, and a very few in Nelson-place; and out of 50 houses in the Crescent, less than 20 have availed themselves of it; this is a deplorable instance of neglect and non-appreciation of the very costly sewer formed at the very thresholds of these houses. The costs of connexion would be very trifling, and the rent-charge for the use of the sewer varies from 10s. to 30s. per annum. The property bordering on this sewer is very valuable. These sewers are available to all Portland-place, Mall-place, Nelson-buildings, Carlton-place, Rodney-place, Boycc’s-buildings, Belmont, back of the Crescent to Prince’s-place and buildings, and Wellington-place; this last containing about 20 houses. An offer was made, within the past year, to allow them a connexion for the sum of 10s. per year, each, or, if preferred, for a fee of 5*l.*; which liberal offer was not accepted by the owners, notwithstanding that more than one occupant of these houses has found the premises inches deep in cesspool filth, which it is the custom to pump up from the kitchen floors into a shallow road drain.

“These sewers were formed by private enterprise; with what serviceable result, or pecuniary benefit, may be gleaned from the foregoing; the cost of making them varied much, having been done at several times, and the nature of soil and rock differing in places. The cost may be stated as ranging from 20s. to 45s. per lineal yard.”

267. There is also a private sewer from below Litfield-place across the Down to the Avon. For about 160 yards, at its upper part, it is circular, and 2 feet diameter. Below, it is 18 inches square. It is used by only 10 or 12 houses, but it has an excellent fall and is capable of draining the area, built, or to be built upon, from the Toll Gate to Litfield and Harley-place, Seymour-place, and square, and part of Clifton Park to the south-west of the Zoological Gardens.

268. The general complaint, throughout Clifton, is of the defective sewerage. Many new and excellent houses in the finest situations drain into cesspools, and are absolutely without sewers at all. Clifton Park, for example, entirely new, and com-

posed of first class houses, has nothing but a surface drain. Even those trunk sewers enumerated, that down Clifton Vale, for example, or Granby-hill, were intended to receive land waters only, and are not fitted for the reception of house refuse. They are too large, run in front of the houses, and have large gutter-grates, the stench from which is generally complained of.

They are, says Mr. Reed:—

“Far from perfect, some being too near the surface to drain basements or cellars, others defective in form and materials, with too little inclination, and objectionable outfalls. Although thus imperfect, and falling short of what might be wished, yet the cost of adapting them, and making others which might be necessary, would not be a tithe of the amount apprehended, under the provisions of the Health of Towns Act, which would confer inestimable benefits upon the whole community, and afford ample security to all existing interests, with compensation for past private enterprise and outlay.”

269. The district of ST. JOHN'S, DURDHAM DOWN, is very ill drained. On the edge of the Down, is a whole village without any drainage, though with a good natural fall. Many of the houses stand in an old quarry, and drain only into the fissures in the rock. Along the road from hence to Bristol, Aust-passage, Henbury, and Westbury road, and the principal western approach to Bristol, the houses drain into a road-side gutter. This, at White Ladies' Gate, communicates with numerous open ditches, which form a widely extended nuisance, very injurious to house property in the neighbourhood.

270. BEDMINSTER is as deficient in sewerage as in every other sanitary requirement. Its natural features have already been described. It admits of being effectually drained at a very moderate cost, if the plan include the whole district.

271. There are no records whatever, of any kind, relating to the Bedminster drains. The map of the district, furnished to me by Mr. Green, shows only about 450 yards of culvert in the whole parish beyond the Avon. Mr. Lucas, Chairman of the Board of Health in Bedminster, states:—

“The whole of the drains in the parish of Bedminster within the county of Bristol are in a bad state, most of them are open drains or original watercourses, and, in a dry season, are very offensive. What covered drains there are, are badly constructed. In *North-street*, the private drains from the houses on the south side, from the coal-pit to the Star Inn, empty themselves into the open drain of the turnpike-road. On the north side there is a covered drain; but even this is open in many places.”

With reference to the *East Tything*, Mr. Henry Hodson states:—

“There are two outlets into the New Cut, both originally too high to be of use as sewers. They were intended to remove land water, and are now in a dilapidated state. These two culverts are the passages for

all the filth that escapes from this large tything, which contains 1,600 houses rated under 10*l.* a-year. From defective construction, the house filth remains in the ditches, and is only removed by heavy rains. These long, open ditches have been a source of complaint for many years."

And Mr. Robert Baker, surveyor to the same tything, observes,—

"That the watercourses are in a bad condition, and require cleaning, and the removal of various encroachments."

With reference to the *North Tything*, Mr. J. Sweetman, its surveyor, states:—

"In North-street, is an open drain from Messrs. Sydney's Colliery to that of Mr. Benjamin Pain, about 360 yards, with the privy and sink-drains of a large boarding-school, and 40 houses running into it; a continuation of the same drain, covered over, and about a foot square, in 382 yards receives the drains of 121 houses. The same drain then runs into an open ditch, 316 yards long, and receives drains from 28 houses: it then joins the main culvert, passing under Coronation-road to the New Cut. There is also an open drain at the back of Charlotte-street, about 62 yards long, leading into the same culvert, and receiving the privy and sink drains of 70 houses, at least. The drains of the privies and sinks of three houses discharge upon the grass of Robert Davey's fields, adjoining the ditch at the back of Charlotte-street. There is likewise an open and stagnant ditch on the side of Paradise-gardens, with the privies and sinks of about 12 houses running into it."

272. It is unnecessary to dwell at greater length upon the condition of the Bedminster sewerage; the evils connected with it have already been described in the account of its inspection. No part of the city stands more in need of protection from the neglect of the house-owner class. *Cesspools* are very numerous throughout the out-parishes, and a fruitful cause of discomfort, sickness, and expense. With respect to the latter, Mr. Armstrong states,—

"The price to empty and cleanse out cesspools varies very much; some situations are much more difficult to come at than others.

"In the most favourable situations, the stuff has often to be carted at a considerable distance, and to be carried to the carts in buckets after being got up. There is also the opening and closing in again, so that, all combined, it is seldom removed at less than 7*s.* 6*d.* per yard cube, as the cart will only carry about half a yard at a time; so that, if a cess-pool is 12 feet long, 7 feet wide, and 10 feet deep, it will cost 1*l.* 6*s.* 6*d.* Smaller and larger are in proportion."

273. HIGHWAYS.—The streets in the old city are under the control of the Commissioners, who expend in their repairs and cleansing about 8,500*l.* per annum. In the "District," the Local Commissioners exercise similar powers over the streets and roads, and expend upon them about 550*l.* In St. Philip and Jacob, and Bedminster, there are Boards of Highways, elected by the parishes, and expending in the former 800*l.*; and in the latter about 500*l.* upon the roads. In Clifton, and Westbury, there are way-wardens, who spend, in the former, 980*l.*; in the latter, 162*l.*, upon the roads.

274. Besides these there are trustees under the Turnpike Acts, who maintain a large extent of road in Clifton, and whose duty it is to maintain the main roads in St. Philip and Jacob and Bedminster. Exclusive of this trust, into the affairs of which I did not inquire, it appears that there is expended annually upon the roads and streets throughout the whole city 11,500*l.*; a large, and, no doubt, a very sufficient sum, if it were administered by one body for the benefit of the whole area.

275. With reference to the carriage ways of the OLD CITY, the Commissioners make the following statement:—

“ There are about 28½ miles in length, or 269,959 superficial yards laid with polled stone and rag pitching of millstone grit and limestone, which lasts on an average from 29 to 32 years.

“ About five and a quarter miles in length, or 65,555 superficial yards, of streets are steined or Macadamized with the limestone from the Hotwells; which mode of forming carriage-ways is adopted with a view to afford facility in travelling over them, the streets being generally very steep; a small portion has been laid to dumb the noise opposite public buildings.

“ Carriage-ways are laid with new polled stone, and the present ones repaired or relaid, under a contract entered into for three years from the 29th September 1847.”

276. The Old City streets appear to suffer materially from being too frequently opened for repairs of pipes. The pitching is of good quality, and much of it is in good order; but in the back streets it is frequently defective, and does not appear to have been originally well laid down. Mr. J. M. Hyde thus describes the process:—

“ The stones, used in pitching, being placed in their position, they receive individually a few blows from a pavier’s rammer, and upon them is thrown a quantity of ashes and lime which is brushed over the surface; the result is, in wet weather, an accumulation of mud, and in dry, the houses are filled with dirt and dust; of course, the surface is not only continually full of holes, but is less durable than the streets of towns in which a better system is adopted, viz., setting the stones in concrete, and filling in the joints with a fluid cement.”

277. “ The *footways* ” in the Old City are—

“ about 46½ miles in length, or 117,249 superficial yards, laid with good, pointed paving of Pennant stone from Hanham or Frenchay averaging about 2½ inches in thickness; its durability is from 18 to 23 years, according to the locality where laid down.

“ Several other portions of the footways are laid with rag, pitching and black rock stone and gravel, to the extent of about 10 miles in length.

“ New footways are laid, and the present ones repaired or relaid under a contract entered into for three years from the 1st March 1848.

“ Jobbing masons and labourers are employed for the purpose of an small and temporary works, and are paid weekly.”

278. Very few, if any, of the *gutter grates* in the public roads are effectually or at all trapped, and as the sewers, besides surface-drainage, carry the soil refuse from the houses, the stench at these openings becomes a very serious nuisance, and one, of which I heard complaints in every direction.

279. But a small part of the "DISTRICT" roads are turnpike. The highways, under the control of the Commissioners, are by no means generally in good order; though this is principally to be attributed to the very scanty funds at their disposal. Moreover, the "District" abounds in highways belonging to private persons, which have never been properly formed, and of which, therefore, the Commissioners are obliged to decline taking charge. Altogether, by whomsoever made or repaired, the highways of the District are, for the most part, in bad order: among such may be mentioned,—Thomas-street, a lane at the back of King's Down Parade, Alfred-place, Paul-street, Oxford-street, Clarence-place, and Walker's-street; and in the eastern moiety of the District, the various roads and paths about Jefferies-garden, Botany Bay, Jubilee-place, Pearce's-buildings, Guinea-garden, and Earl's-mead. Newfoundland-lane is a trough of deep mud from end to end; as are Skinner, and other streets upon the Frome.

280. There are numerous complaints of inefficient scavenging. Mr. J. Maher complains of the inattention of the Commissioners to Dove-street, and states that parts of the District are unduly favoured:—

"Permit me to call your attention to Dove-street, and to state that, to my knowledge, now for upwards of 30 years, no repairs have been done to a part of the above street, notwithstanding that the attention of the Commissioners has been called to drains running externally thereunto, which would not be permitted to exist in any street in the city, and no means taken to remedy them."

281. With respect to the roads in the OUT-PARISH OF ST. PHILIP AND JACOB, Mr. Edward Slade, Chairman of the Board of Highways, observes,—

"There are turnpike-roads passing through the parish, in length about 14 furlongs. The footpaths, by their side, are kept in repair by the Board of Highways, and the Roads, (except Gloucester-lane,) by the Turnpike Commissioners. Upon these roads, within the parish, there are three turnpikes, which are much complained of by the parties severed from the city by them.

"For nearly the whole distance, this parish is divided from the parish of St. George by public roads. A portion of those roads has been, under 5 and 6 Will. IV., divided between the parishes, and one part made repairable by this parish, and the other by St. George's. About five furlongs, belonging to the Commissioners, have not been so divided.

"There are several streets in the parish which have been merely laid out, but never put into a proper state of repair as directed by 5 and

6 Will. IV., and, therefore, have never been repaired by the Board, and are not considered as forming parts of the highways of the parish.

"The materials used have been, for the last few years, black rock limestone for pitching and steining. The paving and edging stone have always been obtained from the Down-end sand-stone."

282. The parish is responsible for about eight miles of highway. The condition of the roads is, on the whole, very defective. The main roads, in the hands of the turnpike trustees, are in a state of very bad repair: they are hollow in the centre, and imperfectly drained; and heaps of mud and scrapings are allowed to remain by the road side, and serve as an excuse for the discharge of much house refuse into the road. West-street, a principal approach to Bristol, illustrates these remarks; as do the Stapleton-road and Pennywell-lane; a peculiarly filthy highway. From West-street, I have received the following statements:—

"We, the undersigned inhabitants of West-street and its vicinity, beg to call your attention to the dirt and filth that is allowed to accumulate, and remain for a longer period than is necessary, in front of our dwellings. We, the undersigned, hope there will be some measures adopted for the removal of this great nuisance.

"William Hatch, No. 2; J. Simmonds, No. 3; James Silcox, No. 4; Abraham Sayer, No. 7; Isaac and Batchelor, No. 11; Frederick Nutt, No. 1; Jas. Bird, No. 98; James Mills Lea, No. 87; David Newbery, No. 5; Daniel Head, No. 90; Edward Colston Parry, No. 15; John Betts, No. 16; James Williams, No. 12."

Mr. James Silcox also states:—

"I beg to call your attention to the state in which West-street is at present kept by the continual annoyance of the mud being scraped together, and left in heaps, week after week, without being removed."

283. The cross-roads and streets in the most crowded parts, near the old city boundary, are all pitched, and a few of them are in good order; others, especially near St. Jude's Church, are not pitched, and are in a filthy condition.

284. The worst highways in the district are those of the class referred to by Mr. Slade, which are the property of private persons, who have built and let houses upon them, but neglect to form and metal the roads. The effect of these unmade, and wet roads, upon the health of those who live by their side, is known to be very injurious. Parts of Thrissell and Twinnell-streets, and the three cross-streets leading out of the latter, are unmade and undrained, and are never cleansed. In fact, the removal of the mud would reduce these streets from one to two feet in level. The highways between West-street and Easton-road, Bath-road, and the Feeder, are, almost without exception, in a very bad condition. On the whole, probably, the population being dense, and the traffic

considerable, they are worse than those of Bedminster. The Lawrence Hill-road is badly scavenged, and the scrapings are allowed to stand at the road side. Lead-House lane, Silverthorne lane, Kingsland road, and Avon street, are badly made, unscavenged, either without footways, or with them in great disrepair, and, altogether, in a discreditable state. Few of the cross-roads, lanes, and streets, have ever been adopted by the parish, and are mere lines of mud. There are also several public footpaths and narrow lanes at present the receptacles for house refuse and ordure.

285. Mr. Slade states, that the pitched part of the streets have been regularly *scavenged*, and the other roads scraped and cleansed. The expenses of scavenging are not distinguished from those of the repairs of roads. The Highway Board state that the main streets are scavenged three times, and the side streets twice, a-week. The police reports of this parish give a statement of the scavenging actually carried on. Of 121 streets and lanes, 5 only are scavenged twice, and 20, once a-week. Of 138 courts, 8 only are imperfectly scavenged twice a-week. At the time of my visit the streets and courts generally were very ill-scavenged.

286. There is a large extent of turnpike-road in CLIFTON, for the most part, in very good order. The White-Ladies road, from Park-street to the Fort Gates, is an exception, the scrapings being collected and allowed to remain in heaps by the road side. The parish repair about six miles of road. Several of the back lanes are in bad condition. There is one behind the Mall hotel, and others about St. John's Church, near the Victoria rooms, and behind Park-place. During the whole of the last six years, this parish had had the advantage of the same surveyor. The accounts are very creditably kept.

287. BEDMINSTER is, in all respects, the opprobrium of Bristol, and in nothing more so than in its roads. These are under the management of two surveyors, one for each tything. The East tything contains 4,996 yards, or nearly 3 miles of roads, and 3,279 yards, or nearly 2 miles of footpaths; the repairs of which, in 1848-9, cost 304*l.* 6*s.* 8½*d.* The North tything contains about 3¾ miles of highways, the repairs of which, in 1848-9, cost 416*l.* 9*s.* 11*d.*; but the same surveyor, in 1850, states the average outlay upon roads, paths, drains, and ditches, for the last three years, to have been 238*l.* 6*s.* 2*d.*

288. The Bedminster roads, turnpike and parish, the streets, alleys, paths, and courts, are all, with very few exceptions, in a bad condition. The exceptions are, a great part of Coronation-road, the Ashton-road from North-street, and the paths and walks about the Old Church. The turnpike trustees, here, as in St. Philip and Jacob, store the scrapings on the road side, and, in some cases, I found these heaps hollowed out, and converted into temporary cesspools for house refuse. East-street, the great thorough-

fare of Bedminster, is in a particularly discreditable state. The part of this road, within the town, is low, hollow in the middle, undrained, seldom scraped, and when scraped, the mud is piled on the road side.

An unusual number of the bye-roads and streets of Bedminster, though thoroughfares, and bordered by rows of houses and densely peopled courts, have never been formed. They are "private," and remain in their original state, excepting that they are deep in mud, and that the soil and house refuse is thrown into them, and has raised their level above the floors of the houses. There are but very few paved footways; many of the bye-streets have no footway at all; the muddy road extends up to the walls of the houses.

289. It is a curious fact, and illustrates the value of statements made by those who have an interest in giving a good account of things, that, in the official reports, the surveyor of one tything reports, to the magistrates, and to me, all the roads, and of the other, all the roads except four, to be in good order! The following memorial, signed by Jesse Crewett, and 43 tradesmen and mechanics living in the streets named, was presented to me during the inquiry:—

"We, the undersigned freeholders, householders, and inhabitants of Spring-street, Princes-street, Regent-street, York-street, Nichol's-street, King-street, and Brown's Field, in the parish of Bedminster, in the City of Bristol, request your attention to the roads, paving, and drainage, in front of our premises, and to the condition of our neighbourhood; the worst drained in this city, and the roads in the worst state. Mud is accumulated in front of our dwellings from 6 to 7 inches in depth; there are no scavengers to remove it, nor any one to repair the roads or paving, although we pay heavy highway and byeway rates, with other local taxes. Also, we remind you, that the late cholera raged in our neighbourhood with great severity. No where in this city or neighbourhood was the cholera so destructive as with us, and in so small a compass. There is water, at this time, in the cellars of dwellings, a foot deep in a stagnant and unwholesome state."

There is no excuse whatever for the disgraceful state of the roads in so large a part of the municipal area. The best material in England, the Black-rock limestone, is quarried within the boundary, and costs, broken, at the quarry, 10*d.* per ton. The lias and some other rocks, sufficiently good for bye-roads, may be obtained at a still cheaper rate. The Hanham flagstone, used for pavements, costs, laid down, 3*s.* 1½*d.* per square yard. The millstone grit, also a rock of the district, forms very excellent stones for pitching.

290. SCAVENGING.—The state of this very important department of public cleanliness is set forth in the police returns already cited, and given in the Appendix. From these it appears, that of 649 streets and lanes, 18 are perfectly, and 43 imperfectly

scavenged, thrice a week; and 307 perfectly, and 75 imperfectly, twice a-week; while 307 are totally neglected. Of 688 courts, 17 are imperfectly scavenged three times, and 239, twice a-week; from 139, the ashes only are removed, and 292 are wholly neglected.

291. I found the public streets of the old city on the whole well scavenged—so well, that I am quite unable to reconcile what I saw, with the universal complaints which I heard, concerning the neglect of the Commissioners of this important branch of their duty.

Upon this head Mr. Harris states:—

“For the purpose of cleansing, the city is divided into 6 districts. Contracts are entered into for the performance of the work for three years, from the 29th September 1848, determinable by the Board only at the end of any one year on their giving three previous months’ notice; the carriage-ways are swept with the bass broom, and cleansed thrice, and the ashes, dust, &c., of the inhabitants are removed twice, in every week; in the districts inhabited by the poorer classes they often bring out their ashes, dust, &c., three times in each week; which is encouraged to prevent an accumulation, and promote cleanliness.

“The districts are numbered from 1 to 6. The principal streets in which trade is carried on are cleansed before 9 o’clock in the morning, from the 1st March to the 31st October, and by 10 o’clock in the morning, from the 31st October to the 1st March; and the work is regularly proceeded with until the more distant and less trading parts of the city are completed.

“*The sweeping and cleansing the footways is not under the jurisdiction of the Commissioners.*

“There are, at present, four contractors, two of whom are farmers, residing in the vicinity of Bristol; and the mud and filth swept up and taken away from the streets, and the ashes and other refuse collected from the inhabitants, are hauled to their farms; the street sweepings (when sales can be effected) are sold by the contractors at from 6*d.* to 8*d.* per ton, and the screened ashes at 1*s.* 3*d.* per load of 40 bushels; but there is always an immense accumulation on hand.

“Every contractor is compelled to haul the sweepings and ashes one-quarter of a-mile out of the city, and a considerable portion thereof is removed from two to three miles.

“The practice of thrice sweeping prevents an accumulation of mud and dirt in the winter, and of dust in the summer.

“In the central, and more trading parts, the inhabitants bring out their ashes in boxes, at the ring of the bell by the contractors’ men; but the ashes are taken out from a great many houses by the scavengers’ men, who are remunerated by a small gratuity at Christmas. There are few ash-pits. The courts in the districts where the poor reside are generally small, and ash-pits are found to be a great nuisance in such confined places, as every description of filth and excrement is deposited therein, and continually scattered over the courts. To avoid this nuisance, more ash-pits have been removed, during the last seven years, than have been made.

“Notice boards are erected in various parts to prevent the illegal

practice of depositing filth and ashes in the streets, and the parties are served with printed notices and occasionally fined.

“The scavengers are also bound to empty, cleanse, and carry away the dirt, &c., found under the grates in the streets communicating with the common sewers, so as to prevent the stoppage of the sewers, and effluvia therefrom.

“It may be here remarked that, from the 11th and 12th Will. III., 1698, up to the year 1806, when this present Board was constituted, the surveyors of the highways, in each parish, made a separate contract with a scavenger to cleanse and carry away the ashes of the inhabitants of such parish.

“There are not any cesspools or privies under the jurisdiction of the Board.

“A man is constantly employed to sweep the footways of Bristol Bridge, and other public footways, where there are not any houses adjoining, and the crossings in the principal streets; for which he is paid 12s. per week, and 8d. per week for brooms.

“The expense of cleansing is 2,350*l.* per annum.”

Mr. S. S. Birtill states, in addition to the above:—

“The number of carts employed in cleansing the city varies from 39 to 50 or 60, according to the state of the weather and season of the year.

“The number of men employed as sweepers is never less than 30, and as every haulier assists the sweeper to fill his own cart, the number employed may be considered, on an average, about 65 men. The average wages are 12s. per week.”

It is now well known that a road, over which there is a heavy town traffic, ought to be regularly WATERED, as much for its own conservation, as for the convenience of those who travel upon it, or live by the side of it. Strange to say, however, the Commissioners do not water their roads.

Mr. Harris states,—

“In some of the principal streets, the inhabitants pay for watering the carriage-ways during the summer months, two or three times every day, as this duty does not fall under the Commissioners.”

292. The inhabitants of St. Philip and Jacob suffer nearly as much inconvenience from the dusty state of their roads, in dry weather, as from their muddy condition, during rain. The following is one of the complaints on this score:—

“Good ventilation, which next to good drainage is of importance, is impossible, under present circumstances. The doors and windows in a great part of the borough, are closed, nearly six months in the year, from sheer necessity; the clouds of dust, penetrating into every corner, being an intolerable nuisance. It is only the best parts of Bristol that are kept watered in the summer months, and this is done by subscription, not compulsion, as it should be, to be effectual. The parts occupied by the poorer classes are never watered except by rain, so that thousands of houses are never in a sweet or wholesome state, owing to the necessity for excluding the dust, and with it, the light and air. The in and out

parishes of St. Philip and Jacob suffer extremely in this way. The Old-market is a wide street, and is never watered to any good purpose, so that the windows are kept closed, and shop goods suffer to a very great degree. The evil is almost as great as bad drainage; indeed the latter, which among the poor is almost universal, would lose some of its ill effects by a free admission of air. Now, the greatest promoter of ventilation, I conceive, would be the keeping down the dust effectually by Parliamentary compulsion. Great part of the parishes of St. Philip, St. James, and St. Paul, contain but few shops, and the inhabitants cannot be induced, nor can most of them afford, to pay for putting down this great nuisance."

293. The principal complaints on this subject arise from Clifton, which being high and dry, and exposed to the wind, is very dusty; and the dust, a fine limestone powder, is particularly injurious to clothes and furniture, and in all respects a very great annoyance, and a serious drawback to the prosperity of a place like Clifton.

Mr. Reed observes—

"I must emphatically assert, that the watering of roads, in and about Clifton, would be an immense boon to the place, so lovely by nature, but so neglected in sanitary matters. You having yourself seen the great necessity for an efficient system of cleansing, and removal of dust, ashes, &c., requires, at this time, no comment from me."

294. PUBLIC WALKS.—Shortly before this inquiry, the following resolution of the Town Council was passed unanimously—

"That the Health of Towns' Committee be requested to bring under the notice of the Superintending Inspector under the Public Health Act, the valuable common lands and public rights in the neighbourhood of this city, and the danger to which the citizens are exposed of being deprived of the benefit arising from the enjoyment of such right by repeated and systematic encroachments."

In consequence, I visited the various public commons and walks in the suburbs of Bristol, and within the city boundary, more especially the Downs above Clifton, and from thence to Durdham; and in this part of the inspection I was accompanied by Mr. Visger, Surveyor to the Society of Merchants, the lords of the manor, and owners of much of the soil of Clifton.

295. I found the Downs in excellent order, railed in to keep off horses, but open to all pedestrians. Various recent improvements were pointed out, especially about the Zigzag walk, as effected at the joint expense of the inhabitants and the "Merchants." The unprotected edge of St. Vincent's rocks has been shown by recent experience to be dangerous, and ought certainly to be railed off. In front of one or two villas, westward of Sundon and Camp houses, certain light fences have been thrown across a turf ride, and some of them project further than is necessary. They were pointed out to me as encroachments, and I found had been the subject of more discussion than they deserve. If the Down along

the road side be public property, these fences are undoubtedly encroachments, but they tend to preserve the turf, and to protect a slight margin of shrubbery. Probably, the desired end would be secured, and all alarm dissipated, if, for fixed fences, were substituted moveable 'chevaux-de-frise,' similar to those employed to protect the turf in fortified places.

296. The state of several of the rural walks immediately about the city, and between Bristol and Clifton, was pointed out to me on the spot, and certainly requires some attention and amendment. Mr. Mallard observes on this subject,—

"I take the liberty of calling your attention to the state of several public footpaths (adjacent to this city, and within the municipal boundary) passing through a park, fields, &c., belonging to private gentlemen or public bodies, but over which the public have a right of way.

"The path leading through Mr. Tyndall's park, from Cotham wood to Tankard's-close, is almost impassable for some days after rain, and in three different places, close to the path, sewage flows over the surface of the ground, and, in one part, this is so bad, that if a person diverges in the slightest degree from the footway, he will step nearly up to his knees in the filthiest stuff that can be imagined.

"Part of another public footway leading from King's down to Redland court, is also, particularly after wet weather, in such a muddy condition that unless a man have very stout and sound boots, he will not venture through it, and as to females, nothing but a matter of necessity would induce them to pass over it.

"Both the above places are favourite walks of the inhabitants of Bristol, especially ladies and their children; and as exercise will, I believe, be admitted to be conducive to health, surely, such walks should be kept in order.

"A third public path is, if possible, in a worse state than the two above-named, viz., one leading from the Butts, in the parish of St. Augustine, to the Limekiln Dock; this is called the Sea Banks, and runs parallel with the Floating Harbour. The ground on each side is let to timber merchants, and their timber is scattered over the whole of it; that frequently, to get out of the mud, a passenger finds it convenient to walk along a balk of timber.

"If this path were kept in good order, it would afford a pleasant airing place for the inhabitants of a part of the city who are penned in narrow courts and confined situations, and would tend to keep them in good health. I could enumerate many others."

297. LIGHTING.—Although no less than 5,000*l.* per annum is paid for lighting the city of Bristol, only a part of its area is lighted at all, and a very small part indeed is well lighted. About half the old city, including 32,000 inhabitants, is in the latter condition. Clifton, part of the 'District,' and the rest of the city containing 52,000 inhabitants, are imperfectly lighted, and St. Philip and Jacob (out), and Bedminster, with 40,000 inhabitants, are not lighted at all. The gas-lighting arrangements are defective, and they are dear. Mr. Hodson states,—

“Pipes are laid in some portions of the parish for private use—in t through most main streets; but there are no public lamps.”

298. In 1847, evidence was taken before ‘surveying officers,’ upon application for an Act from the Clifton Company, from which it appears that out of 20,000 houses in the borough, not more than one-third were supplied with gas. In the printed minutes, I find evidence of Mr. C. T. Hill, R.N., who states—

“I have had considerable experience in gas lighting; practically, I have known Bristol upwards of 20 years. I have contracted for the lighting of several large towns in England. I have resided in Bristol several months; it is decidedly one of the worst lighted cities in England, so far as my experience goes; the public lights, particularly, are insufficient in number. I will particularly instance two great thoroughfares in this city, Marsh-lane, and another, which, on reference to the map, may be found to be one of the longest streets; and it will be admitted, I think, those are generally used, and in some respects where light is more required, and there are only three lamps in these two long streets.

142. Mr. *Herbert*. Each street?—Yes, they are perhaps some 70 yards apart, and that I would say with qualification. The map will give it. The fact is, there are only three lights in Marsh-street, one of the worst at night, and one of the greatest thoroughfares, in the day.

143. What do you mean by worst at night?—One of the most dangerous, frequented by the lowest class of Irish, where there is screaming, riot, and confusion, at all times. I have heard the most dreadful things there.

144. Most disorderly?—One of the most disorderly districts in the city. I am prepared to show upon the map, the distance of them, and this cannot be contradicted. I have no interest in either Company only as a ratepayer of Bristol, and one of the public generally. The public lighting in Queen-square, which is a central position of the place, and which has a great thoroughfare, is decidedly insufficiently lighted. It is, as to the public lighting. I would make an observation as to the private lighting, which is, that it is extremely deficient at particular periods; for instance, on market nights, or on those occasions when gas is most wanted by the public, there is a great diminution evidently; the gas is not supplied at a sufficient pressure; there is a deficiency in quantity to supply the demand.”

299. Such parts of the city as are lighted at all, are lighted by the gas companies, one in Bristol, the other in Clifton. The Bristol Gas Light Company obtained their Act 1819, 59 Geo. III. Their works are situated in St. Philip and Jacob, (out parish,) near Marsh Bridge. The premises are extensive, and the works on a large scale. The following account of the operations of this company was put in by Mr. E. Wait, their clerk.

“ BRISTOL GAS LIGHT COMPANY.

“ Contract with the Commissioners of the City of Bristol.

	Each per Ann.		£.	s.
654 batwings, consuming 5 feet per hour	4	4	2,746	16
137 „ „ 2½ „ „	3	0	411	0
2 „ „ 7 „ „	5	10	11	0
456 cocksurs, consuming 1 foot per hour	1	16	820	16
			<hr/>	
			3,989	12
Less cost for lighting, cleansing, and repairs of the above 1,249 lamps, at 16s. each per annum			999	4
			<hr/>	
Net price paid for gas			2,990	8

“ The distance from each lamp is from 60 to 70 yards.

“ The Company are paid 3*l.* 8*s.* per annum (exclusive of lighting, cleansing, and repairs), for a 5 feet per hour burner, or at the rate 2*s.* 8½*d.* per 1,000 feet, and in like proportion for the other burners.

“ Length of pipes laid down:—

Mains, from	to	inches diameter,	yards.
Branches, from	„	„	„

“ Coals, average price, 8*s.* 6*d.* per ton.

“ Specific gravity or quality of gas, 445.

“ Intensity, 5 feet per hour, equal to 13 spermaceti candles; six the pound.

“ Coke, 5*s.* per ton wholesale; 6*s.* 8*d.* per ton in smaller quantities.

“ Price of gas per meter:—

6*s.* per 1,000 feet, subject to the following discount.

When the rental per meter for the half-year, from 21st December to 24th June, or from 24th June to 21st December, shall be

20*l.* and under 30*l.* 7½ per cent. or net 5*s.* 6½*d.* per 1,000 feet.

30*l.* „ 40*l.* 10 „ „ 5*s.* 4¾*d.* „ „

40*l.* „ 50*l.* 15 „ „ 5*s.* 1*d.* „ „

50*l.* „ 100*l.* 20 „ „ 4*s.* 9½*d.* „ „

Special contracts 4*s.* 6*d.* „ „

“ District of St. James and St. Paul.

Contract terminated in September, 1847; are now lighted for year to year.

Public lamps:—

	Each per Ann.		£.	s.
14 burners, consuming 2 feet per hour	2	10	35	0
77 „ „ 4 „ „	4	10	346	10
13 „ „ 6 „ „	6	0	78	0
			<hr/>	
			459	10

Less cost for lighting, cleansing, and repairs of
the above 104 lamps, at 16s. each per annum

83 4

Net price paid for gas 376 6

"The Company are paid 5*l.* 4*s.* per annum (exclusive of lighting, cleansing, and repairs), for a 6 feet per hour burner, or at the rate of 5½*d.* per 1,000 feet, and in like proportion for the other burners.

"This is altogether an outlying district, extending over a large area. Scarcely any shops, and very few private houses are lighted.

"Productive power:—

"The Company could manufacture treble the quantity of gas now made, should it be required for public or private lighting.

"There are no authorized public bodies to contract with, in the parishes of Bedminster, St. Philip and Jacob, or Westbury-upon-Trym. The Company's mains are laid through the greater part of the two first-mentioned parishes, and through that part of Westbury lying on King's-down."

300. The Bristol and Clifton Gas Light Company obtained their Act 4 Geo. IV. (1823). Their works are upon the margin of the Floating Harbour, below Brandon Hill. In February, 1847, they had laid down about 31,480 yards of street main, of which 14,925 yards were in Bristol, and 16,555 yards in Clifton. The Bristol mains were from 2 to 14 in. diameter; those in Clifton, from 2 to 12 in.

301. The following particulars have been furnished by Mr. H. Townsend, clerk to the Company, and by the surveyor of Clifton. They supply about 340 public lamps to Clifton, at a charge of 18*s.* per annum each. They also supply the posts and lamps at a cost to themselves, included in the above, of 6*s.* each per annum, and they light them at a cost of 16*s.* 6*d.* Their charge, therefore, is thus composed:—

	£.	s.	d.
Lamp-post, lantern, &c.	0	6	0
Lighting	0	16	6
Gas	3	15	6
<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>			
Total per annum, each light . . .	£4	18	0

The burners are "batwing," each consuming not less than 5 cubic feet of gas per hour, and burn from sunset to sunrise the whole year. This is stated to correspond to a price of about 3*s.* 4*d.* for 1,000 cubic feet supplied. The lamps are placed throughout the parish at an *average* distance from each other of 70 yards.

The price of gas to private consumers is 6*s.* per 1,000 cubic feet per annum, subject to the following scale of discounts, viz.:—

If the gas consumed in the half-year, that is from the 31st December to 30th June, or from 30th June to 31st December, shall amount to

		Cubic Feet.
20 <i>l.</i> and under 30 <i>l.</i>	7½ per cent., or 5 <i>s.</i> 6¼ <i>d.</i> per 1,000	
30 <i>l.</i> „ 40 <i>l.</i> 10	„ 5 <i>s.</i> 4¾ <i>d.</i>	„
40 <i>l.</i> „ 50 <i>l.</i> 15	„ 5 <i>s.</i> 1¼ <i>d.</i>	„
50 <i>l.</i> „ 100 <i>l.</i> 20	„ 4 <i>s.</i> 9¾ <i>d.</i>	„

Special contracts at 4*s.* 6*d.* per 1,000 cubic feet.

The price paid for coal is as follows:—

	s.	d.
For Welsh coal (Cardiff)	10	0 per ton.
For Gloucestershire (Coalpit-heath)	7	6 ,,

making an average cost, according with the proportions of each kind used for carbonizing, of 8s. 6d. per ton.

“The price obtained for coke is generally 6s. 8d. per ton. A wholesale customer is supplied at 5s. per ton; making the average price about 6s. per ton.”

It appeared from the evidence of the clerk to the Clifton Company before the surveying officers (1847), that the coal then used was a mixture of equal parts of Welsh coal from Cardiff at 10s. and Gloucestershire coal-pit heath-coal at 9s. per ton delivered. The product of a ton of the mixture was 7,500 cubic feet of gas at specific gravity 420. Gas, from the Welsh coal, he stated to be purer, but that from the Gloucestershire coal, to have a higher illuminating power. The other products are 13 cwt. coke, and 10 gallons of tar. The refuse lime is about 90 lbs.

The following particulars respecting the lighting of the CITY, under the Commissioners, have been furnished to me by the body:—

“Every street and place in the city, to its utmost boundary, is lighted with gas every night during the year.

“Immediately after this method of illumination was discovered and rendered practicable, it was adopted in Bristol.

“The contract is for 7 years, commencing 29th September 1847, with the British Gas Light Company, who were compelled by the Board to lay their pipes through every street, lane, passage, and square in the city. There is another Gas Company in Bristol called the Bristol and Clifton Gas Light Company.”

“The number of lamps is as follows:—

	£.	s.
2 No. 7 batwing burners,	at 5	10 per annum each.
654 No. 4 ,,	at 4	4 ,,
137 No. 2 ,,	at 3	0 ,,
456 No. 1 cockspur or jet burners,	at 1	16 ,,

1,249 placed about 70 yards crossways from each other; and the numbers are affixed in each lamp.

“These prices include every expense.

“The lights burn, on an average, 9 hours 53½ minutes per day, or 3,613 hours throughout the year.

“The lamps, lamp-irons, and pillars were erected by and are the property of, the Board; but the Gas Light Company are bound to keep them in repair, and to paint the tin work, pillars, and lamp-irons once in every year with one good coat of oil paint. All accidents arising from the pillars and irons is repaired by the Board.

“The time of lighting and extinguishing varies, weekly, and is regulated by a table (given below). It is commenced in the court and narrow streets, and terminates in the more open ground.

“There are 16 men employed in lighting and cleaning the

lamps; each has about 78 lamps under his care, and is occupied about 1½ hour in lighting, and rather less in extinguishing. The whole are cleaned weekly, a portion each day.

“The total cost of lighting, including alterations in lamp-irons, was, in 1849, 4,058*l.* 19*s.* 2.

“As lamp-pillars are found inconvenient in the narrow streets, the major part of the lamps are erected on brackets against the houses.

“As a matter of history, and to show the progress of science, it may, under this head, be stated, that by the statute of William III., 1698, before referred to, every householder, chargeable with two-pence or more by the week, to the relief of the poor, and whose house adjoined to any public street, was required, every night, from Michaelmas to Lady-day yearly, to set or hang out candles or lights, in lanterns, on the outside of his house, next the street, to enlighten the same, for the convenience of passengers, from time to time, as it should grow dark, until 2 o’clock at night; penalty 2*s.* for every default.”

TABLE of TIME of LIGHTING and EXTINGUISHING the GAS LAMPS in the CITY of BRISTOL.

From	To	All to be Lighted by	Begin to Extinguish at	From	To	All to be Lighted by	Begin to Extinguish at
		H. M.	H. M.			H. M.	H. M.
1 Jan.	8 Jan.	4 35	7 0	3 July	9 July	9 30	2 40
9 „	15 „	4 45	6 55	10 „	16 „	9 20	2 45
16 „	22 „	4 55	6 50	17 „	23 „	9 5	2 55
23 „	29 „	5 6	6 45	24 „	30 „	8 50	3 5
30 „	5 Feb.	5 17	6 35	31 „	6 Aug.	8 35	3 15
6 Feb.	12 „	5 30	6 20	7 Aug.	13 „	8 20	3 25
13 „	19 „	5 42	6 10	14 „	20 „	8 5	3 40
20 „	26 „	5 54	5 55	21 „	27 „	7 50	3 50
27 „	5 March	6 6	5 40	28 „	3 Sept.	7 35	4 0
6 March	12 „	6 18	5 25	4 Sept.	10 „	7 20	4 10
13 „	19 „	6 34	5 15	11 „	17 „	7 5	4 25
20 „	26 „	6 46	5 0	18 „	24 „	6 50	4 35
27 „	2 April	7 0	4 45	25 „	1 Oct.	6 35	4 45
3 April	9 „	7 12	4 30	2 Oct.	8 „	6 20	5 0
10 „	16 „	7 25	4 10	9 „	15 „	6 0	5 10
17 „	23 „	7 37	3 50	16 „	22 „	5 45	5 20
24 „	30 „	7 50	3 30	23 „	29 „	5 30	5 30
1 May	7 May	8 2	3 15	30 „	5 Nov.	5 15	5 45
8 „	14 „	8 15	3 5	6 Nov.	12 „	5 0	6 0
15 „	21 „	8 30	3 0	13 „	19 „	4 50	6 10
22 „	28 „	8 44	2 50	20 „	26 „	4 40	6 20
29 „	4 June	9 0	2 40	27 „	3 Dec.	4 35	6 30
5 June	11 „	9 15	2 30	4 Dec.	10 „	4 30	6 40
12 „	18 „	9 30	2 30	11 „	17 „	4 30	6 50
19 „	25 „	9 40	2 30	18 „	24 „	4 30	6 55
26 „	2 July	9 35	2 30	25 „	31 „	4 30	7 0

302. The worst lighted parts of the “District” are those also in the filthiest condition, and the inhabitants of which most require the attention of the police. I heard numerous complaints of the inefficiency of the lighting arrangements. Mr. W. O. Hare, clerk to the Commissioners, states,—

“The present number of lamps lighted in the district is 105, of which number 18 are fishtails (No. 2), contracted for at 2*l.* 10*s.* per annum; 77 are fishtails (No. 4), contracted for at 4*l.* 10*s.* per annum; and 12 are batwings (No. 3), contracted for at 6*l.* per annum. This number is confessedly inadequate to the satisfactory lighting of the outskirts of the district, and is hardly sufficient for the exigencies of the more densely inhabited portions, but the expenditure already exceeds the sum which the Commissioners can prudently apply to this object.”

Mr. Hare further states,—

“It is to be observed that the charges above mentioned, as contracted for lighting, considerably exceed the charges made for public lamps in the adjoining city, also under contract, both of which contracts are made by the same Company. The Commissioners have repeatedly endeavoured to procure a favourable alteration in this disproportionate charge but have been unsuccessful, the Gas Light Company contending that they supply all the public lamps at a loss, which, in the city, is compensated by the great quantity of gas consumed by private consumers, while in the district, the quantity of private consumption does not afford the same equivalent.”

The following statement relates in part to the “District,”—

“The inhabitants of Cotham wish to call attention to the need of lighting that part of the parish of Westbury which forms the district of Kingsdown and Cotham, viz., Paul-street, Oxford-street, Portland-street, Clarence-place, Cotham New-road, Kington-buildings, Alfred-place &c., &c.; also to the offensive smell at the bottom of Portland-street on both sides the road.

“Richard Fry, Wm. W. Green, Jos. B. Atkinson, Henry Oldland, W. Mallard, J. Lloyd, Sam. Goldney.”

303. Finding Mr. Hill, whose practical experience in gas lighting is very extensive, to be still resident in Bristol, I called upon him for a statement of his present views as to the general lighting of the city.

He observes,—

“The Bristol gas lighting is imperfect and insufficient. Two Companies are established, but do not oppose or compete with each other, and, in effect, enjoy a monopoly.

“The price of gas is comparatively high; about 5*l.* per annum for street lamps, and 6*s.* per 1,000 cubic feet for interior lighting. The city pays upwards of 5,000*l.* per annum for public lights; a saving of 3,000*l.* might be made on this single head, or the number of lamps might be more than doubled. The lamps are placed at unusual distances apart. There should be 40 to a mile, whereas, in many instances they are 70, 80, and 90 yards apart, or 25, 22, 20 to the mile.

“Many public roads and streets are not supplied at all. The road from White Ladies’ Gate to Cotham, a much frequented thoroughfare, at Hampton-terrace, containing about 20 houses of 40*l.* value, are entire without street lamps. Redland Park, Lower Redland, Cotham-lane and Chapel Green lane, a much frequented short road from the city to the north suburbs, are in the same condition. The ‘Quarry District

is also in darkness ; as is a continuous line of buildings facing Durdham Down. As a measure of police, comfort, and security, this neighbourhood should be lighted.

“The populous suburb of *Bedminster*, containing an estimated number of 20,000 inhabitants, is without lamps. It is notoriously the resort of thieves and loose characters of the worst description. This great improvement might be adopted advantageously, and carried out simultaneously with *draining, paving, and watering*. Property would be enhanced thereby in value. Its proximity to the city and chief centre of business would render it a safe speculation ; and the proposed improvements would greatly contribute to the public health, physically and morally. The establishment of a gas work, at the pit’s mouth of any coal shaft, would admit of a cheap and liberal supply, which would regulate hereafter the prices of the other Companies by inducing a reduction. The raw materials, of every kind, and labour, are low ; 40s. per lamp, for public, and 4s. per 1,000 cubic feet, for private lighting, would be remunerative, and induce a large consumption.

“In Clifton, the public lamps are generally 70 yards apart, and only erected where the *Company* please ; and the prospect of private lighting may render them profitable in excess.”

304. The city of Bristol ought to be both well and cheaply lighted. It commands, at least as conveniently as any city in the empire, the materials for gas making and gas burning. It stands in a coal basin, and upon three railways and a navigable river. Its communication with the coal and iron ports of Wales, from Newport to Llanelly, is rapid and direct. Its principal suburb abounds in quarries of the best limestone. Coal, iron, and lime are, therefore, to be had in abundance, of good quality, and at low prices.

305. The Old City, St. Philip and Jacob (out), and much of Bedminster, contain a population so densely packed as fully to counterbalance the more scattered population of Clifton and the “District,” and to admit of sufficient lighting at very moderate prices, if the lighting arrangements for the whole area were under the control of one local Board. Proper street-lighting has now become one of the necessities of every town. It is an important aid to the police, and not only facilitates the detection of street offences, but, what is of more consequence, renders people less likely to commit them. Bristol and Clifton taken together, says Mr. Hill,—

“Stand second (being exceeded only by Liverpool) among the 12 towns in England which contribute the largest amount to the window-tax. If daylight is thus needed, gas light, *at a fair price*, will be more generally used.”

306. DRUNKENNESS appears to be the vice most directly produced by a dirty and unhealthy home, and that through which, more than any other, the labouring classes are insensibly led into pauperism, or the more degraded condition of beggary. It has

been truly said that "all that the rich could do to elevate the poor, could hardly equal the advantage that would be gained by the poor for themselves, if they could thoroughly subdue that one vice of drunkenness, the most wasteful of all vices." It is very difficult to obtain materials for a calculation of the amount of spirit drinking, drunkenness, and the sums expended therein, in the great towns; and those who have attempted it, though all allow the amount to be enormous, have differed widely in their results. Thus, Mr. Alison calculates, that in Glasgow 250,000 people spend in whiskey 1,200,000*l.*, and Dr. Chalmers calculates the same expenditure at 300,000*l.*

307. The police returns do not throw any great light on the subject; they take notice not of drinking, but of drunkenness, and only of comparatively a very few of the very worst instances. The following are the Bristol returns for the year 1849:—

Stations.	Males.	Females.	Total.
Bedminster . .	82	37	119
St. Philips . .	28	11	39
Clifton . . .	44	25	69
Central . . .	114	52	166
Total . . .	268	125	393

308. The Bedminster cases occur chiefly in Temple-street, Temple-gate, Redcliffe-street, Redcliffe-hill, and East-street, Bedminster; the St. Philip cases, in Old Market-street, West-street, and Gloucester-lane; the Clifton cases, in Hotwell-road, Limekiln-lane, and around St. Augustine's Parade; and the central cases, on the Welsh Back, Broad and Narrow Quay, Back-street, Tower-lane, Lewin's mead, and St. James's Back. These 393 cases, no doubt, represent a vast mass of drunkenness, but no accurate conclusion as to its amount can be drawn from them.

309. As this vice is, above any other, produced by those evils which it is the object of the Public Health Act to remove, and as the sums spent in its indulgence by the lowest classes, whatever they may be, certainly exceed, by very much indeed, the expenses of a properly arranged water supply, drainage, and house accommodations, I requested Mr. Joseph Eaton, of Bristol, an eminent member of the Society of Friends, and well known as having given the munificent premium which called forth Dr. Carpenter's recent work on drunkenness, to prepare a calculation upon the subject, and this I now proceed to lay before your Board.

"There are in the city of Bristol the following places for the sale of intoxicating drinks:—

Inns, hotels, and taverns	56
Public-houses	327
Beer-shops	279
Wine-merchants	21
Brewers	16
Brewers' agents	9
Bottled liquor dealers	14
Spirit and wine dealers	76
	<hr/>
Total	798
Besides which there are above 100 beer-shop keepers entered in the Directory as grocers	100
	<hr/>
Total	898
	<hr/>

310. To arrive at a conclusion as to the amount of business done at the public-houses, the following statement of their actual expenditure has been made out:—

	£.	s.	d.
“The 327 houses are rated at an average of about 28 <i>l.</i> each	9,156	0	0
The actual rent for such houses is about one-fourth more	2,289	0	0
Taxes 6 <i>s.</i> in the pound on the rating	2,746	16	0
Cost of licence to sell beer, 60 houses under 20 <i>l.</i> at 22 <i>s.</i>	66	0	0
The remaining 267, at 66 <i>s.</i>	881	2	0
327 houses, spirit licence, and a few wine licences, average 8 <i>l.</i>	2,616	0	0
Various charges of business, servants' wages, interest of money, wear and tear, also maintenance of 327 families, about 150 <i>l.</i>	49,050	0	0
Average profit on each house 25 <i>l.</i>	8,175	0	0
	<hr/>		
Total	£74,979	18	0
	<hr/>		

Total cost and profit of 327 public-houses, to make up which, reckoning the profit at 50 per cent., it would require the sale of drink yearly, to the amount of	149,959	16	0
279 beer-shops, averaging receipts per week each 3 <i>l.</i>	43,524	0	0
100 small ditto, 30 <i>s.</i>	7,800	0	0
	<hr/>		

Making a total for public-houses and beer-shops of 201,283 16 0

The above amount for public-houses shows a weekly average receipt of less than 9*l.* per house; an amount, which it may be fairly stated, is below that actually received, and sufficiently so, it is conceived, to set against

	£.	s.	d.
Brought forward . . .	201,283	16	0
the small sum received at such houses besides what is paid them for drink ; assuming this to be the case, it may be considered as a very low average to put all the rest of the houses for the sale of these drinks (considering such drinks of much greater value than the above) at 10 <i>l.</i> per week. The few breweries, and other houses, although supplying the public houses, &c., supply private families by the cask, to a considerable extent. On this supposition, we should have inns, taverns, and hotels, 56 ; spirit and wine dealers, 76 ; wine merchants, 21 ; brewers, 16 ; brewers' agents, 9 ; bottle liquor dealers, 14 : forming a total of 192 houses, at 10 <i>l.</i> per week for 52 weeks	99,840	0	0
Total	£301,123	16	0

“ This sum, although a very large one, is below the amount actually expended, if compared with the estimates that have been formed of some other places ; and more especially so, when tested by the calculations made by R. and J. Chambers, of Edinburgh, who, in a most elaborate article on this subject, prepared with great care, show that the sum for the entire kingdom expended in intoxicating liquors is 65,000,000*l.* sterling, being more than 2*l.* per head for every man, woman, and child ; and as a larger amount is expended in our principal towns, especially sea-ports, it may safely be reckoned that in this city the amount, per head, would be 2*l.* 10*s.* annually ; and reckoning our population at 140,000*l.*, this will give 350,000*l.*, as the amount expended in strong drink.

“ As their calculation was formed on the Excise Returns for the whole kingdom, it is manifestly more to be depended upon than any estimate, however carefully made, for a particular place. Not wishing, however, to overstrain the case, we will suppose that the sum of 250,000*l.* only is spent annually in this city, and that of this, 150,000*l.* is spent by the working classes, and those immediately above them ; were only half of this sum saved from its worse than useless expenditure : we should then have left, a sum of 75,000*l.* annually, available for the purchase of the necessaries and comforts of life, for obtaining better dwellings, clothing, &c., and for the important object of education, which would insure a greater amount of happiness to themselves and the rest of the community than we have, as yet, unhappily, ever witnessed in this country. That this measure of reform, and much more than this, is practicable, the experience of multitudes of labouring men in this country abundantly proves.

The foregoing statement respecting the sum spent in drink, will appear the more striking, if we contrast with it the number of persons employed in the sale of some of the necessaries of life ; thus we find that there are of

Bakers	130
Butchers.	138
Provision dealers	48

Making a total of . . . 316

Whereas, for the sale of intoxicating drinks, the number is, at least, 898."

311. There are in the city of Bristol about 12,300 houses at, or under, 10*l.* rated rental. Supposing the consumption of intoxicating drinks by their inhabitants to amount to 150,000*l.*, this will be nearly 12*l.* 4*s.* per house per annum, or 4*s.* 8*d.* per week.* This amount will be compared with the cost of sanitary remedies, in the concluding part of this Report. It may be observed that the 250,000*l.* estimated to be spent in drinks, amounts to a rate of 13*s.* 5*d.* in the pound upon the rated rental of 373,600*l.*

312. The subject of BURIAL GROUNDS is one upon which great interest is felt in Bristol, and which occupied a prominent place in the present inquiry. I have to acknowledge the assistance, in this branch of it, of the Rev. Canon Barrow, of Mr. F. Ward, on the part of the corporation of the poor, and particularly of Mr. C. Savery, who furnished me with a report embodying all the statistics of interments collected during the formation of the Arno's Vale Cemetery Company, of which he is the registrar.

313. The burial grounds in Bristol, belong either to the established church, the dissenting communities, or to private persons. There is also, just outside the city boundary, a public cemetery. It appears that there are in the city, about 61 places of burial, of which 37 are Church of England, one Moravian, one Roman Catholic, one Jewish, 16 dissenting, and five private.

314. The first of the following returns, supplied by the courtesy of Mr. F. Ward, relates, with four exceptions, to the old city only. It compares the population and number of houses in each parish, with the area of its burial-grounds, and states their condition, their annual average of interments, and the greatest number that have taken place in any one year : 18, out of 23, are returned as " full ;" yet, in these grounds, all absolutely within the city, and many in the worst parts of it, the annual average of interments is 975 ; and those in the years of 1848 and 1849 appear to have been very much more numerous. The grounds here stated to be " full," will generally be found to be very full indeed ; and the deposit of nearly 1,000 corpses, under such circumstances, is not unlikely to be attended with annoyance to the feelings, and injury to the health of the living. The next return is very incomplete, and is little more than a list of the burial-grounds outside the old city.

* The town of Bury, with a population of 25,000, spends annually, in beer and spirits, 54,190*l.*, or 2*l.* 3*s.* 4*d.* per head.

LIST of PARISHES in the old City of BRISTOL, with the NUMBER of HOUSES and POPULATION in each, at the last Census; the Number and Area of the Parochial Burial-grounds in each Parish, and the Average Annual Number of Intermments therein.

PARISH.	Number of Houses,	Popula- tion, 1841.	Number of Parochial Burial-grounds.	Area, in Square Yards.	State.	Average Annual Inter-ments.	Largest Number in one Year.	REMARKS.
All Saints	47	174	One	50	See remarks.			{ Only two interments since 1825, Burial-ground is paved, and forms All Saints-passage.
St. Augustine-the-Less	1,247	9,242	{ Two:— Parish churchyard. St. George, Brandon-hill		Full Not full	55	(1848) 94	{ The Castle Precincts are extra-parochial. The inhabitants bury in St. Peter's and St. Philip's churchyards.
Castle Precincts	296	1,830	None					{ The parish of St. Ewen is ecclesiastically united with Christchurch. The crypt under the church is in a good state, and not full.
Christchurch	175	1,092	{ Two:— 1, Adjoining the church	208	Full	15	(1848) 24	{ The crypt is in a good state, and not full.
St. Ewen	14	55	2, In Duck-lane	209	Full	235	(1847) 256	{ The parish of St. Leonard is ecclesiastically united with St. Nicholas. The crypt is in a good state, and not full.
St. James (part of)	1,563	10,555	One	6,064	Full	13	(1847) 21	
St. John	187	938	One	576	Full			
St. Nicholas	259	2,166	{ Three:— The Rackhay The Welsh Back The crypt and land adjoining the church	415 561 575	Full Full Full	40	(1849) 62 (1845) 43	
St. Leonard	53	281	One	108	Full			
St. Mary-le-Port	52	277	One		Full	7	(1845) 13 (1849) 2	
St. Mary, Redcliffe	1,213	7,025	One	9,754	Full	146	(1849) 170 (1848) 152	
St. Michael	630	4,254	One	3,200	Full	67	(1849) 7 (1848) 94	
St. Paul (part of)	1,689	10,762	One	9,075	Not full	136	(1849) 145	{ The area of the Bristol Infirmary burial-ground, in this parish, is 666 square yards. The crypt under the church is in a good state, and not full.
St. Peter	215	1,515	One	791	Full	30	(1847) 66	{ Consecrated 1838.
St. Philip and Jacob (part of)	697	4,110	One		Not full			{ Information refused.
St. Stephen	253	2,269	{ Two:— Front burial-ground Back burial-ground	780 } 1,068 } 288	Full Full Full	33	(1848) 37	{ The vaults under the church are full of water.
Temple	957	6,189	One	6,860	Full	179		
St. Thomas	226	1,403	{ Two	996 } 1,242 }	Full Full	14	(1847) 26	
St. Werburgh	30	99	One	300	Full	5	(1848) 7	{ Leadern coffins always required.
St. Philip and Jacob (New Church) Cathedral				6,020 11,162				
* Clifton			{ Lower ground; church- yard; Dowry chapel- yard	17,217		162	(1848) 183	

PARISH.	Number of Houses.	Population in 1841.	Number of Parochial Burial-grounds.	Area in Square Yards.	State.	Average Annual Interments.	Largest Number in one Year.	REMARKS.
Broadmead Chapel (Baptist)	2,420	Full	..	..	In use 200 years. Fees 9s. 6d. to 1l. 2s.
Broadmead-ground, Redcross-street	1,570	..	37	..	Fees { Interments . . . £3 11 0 Keeping graves . . . 1 0 0
Wyeh's-ground, near Pennywell-road	509	..	13	..	£4 11 0
Langton-street, Cathay
Hope Chapel, Hotwells	{ In use 70 years. Fees 14s. 6d. to 1l. 7s.; ground 1l. 1s. per square foot.
Brunswick-square	4,840	Not full	30	..	Fees 1l. 2s. to 3l. 8s. All brick vaults.
Brunswick Chapel, Brunswick-square	800	Not full	7	..	..
Redcross-street, Wesleyan	1,200	..	18	..	Few interments.
Wesleyan Chapel (Baptist Mills)	2,420	Not full	150	..	In use 35 years. Fees 7s. to 3l. 3s.
Redcross-street, Tabernacl	10 vaults	Full	1	..	Several bodies have been removed to the cemetery.
Counterslip	Full	..	..	Opened since 1836-7.
Francis'-ground, West-street	Full	..	..	Private Property.
Williams'-ground, West-street	Full	..	..	..
Howlands', Wilson-street, St. Paul's, near Gideon Chapel	Full	..	..	In use 40 years. Fees 5s. 6d. to 1l. 6d.
Thomas' (St. Philip and Jacob)	Not full	..	..	..
Portland-street ground	Nearly full	..	..	..
Infirmary	One	400	Not full	15	..	In use about 80 years. No charge.
Morviad, Upper Maudlin-street	..	240	One	1,000	Not full	5	..	Established 1755.
Quakers' "Workhouse" in St. Paul's	4,372	Not full	164	..	..
Quakers', Redcliffe-pit.	Not full	..	..	In use 200 years. No charge.
Quakers', the Friars	Full	..	..	In use 200 years.
Jews	90	Not full	..	..	Private property. No interment for nine years.
Roman Catholic	Consecrated within the last few years.
St. Andrew's, Montpelier.
St. Matthew, Kingsdown
St. Jude
St. Simon
St. Barnabas
Bedminster Old Church
St. Paul's, Bedminster.
St. Luke's (St. Philip and Jacob)
Trinity, West-street	Recently opened. Few or no interments.
St. John's, Clifton	153	..

RETURN of the NUMBER of INTERMENTS in the BRISTOL GENERAL CEMETERY, at ARDVALE, in each Year, from 1840 (including one Interment in 1839, before the Cemetery was opened for general use) to February 12, 1850, specifying the Parishes to which parties belonged, made to G. T. CLARK, Esq., the Superintending Inspector visited Bristol on the subject of the Public Health Act.

	Total.	1839	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849
<i>As to Parishes in Bristol, viz.—</i>												
All Saints	3	.	.	.	.	.	2	.	.	.	.	.
Bedminster	93	.	.	.	2	13	7	7	12	17	19	14
Castle Precincts	20	.	.	.	.	2	1	2	2	6	3	4
Christchurch and St Ewen	16	.	1	.	1	1	.	2	2	3	2	4
Clifton	139	.	.	4	3	4	13	9	13	32	30	25
St. Andrew	27	.	.	.	.	.	.	.	3	3	10	11
St. Augustine	58	.	1	2	.	4	5	6	7	1	4	23
St. Barnabas	3	.	.	.	.	.	.	2	.	.	1	.
St. George's, Brandon-hill	35	.	.	2	2	2	2	7	1	4	4	8
St. James	153	.	.	.	4	4	15	15	8	7	22	65
St. James and St. Paul (District of)	41	.	.	2	1	2	8	9	3	8	5	3
St. John the Baptist	24	.	.	.	2	1	2	5	4	1	5	4
St. Mary-le-Port	8	.	.	.	.	.	.	.	3	.	2	3
St. Mary Redcliffe	130	.	.	2	7	3	5	11	10	13	17	54
St. Michael	42	.	.	1	1	.	4	4	8	5	8	10
St. Nicholas	38	.	.	1	2	3	7	3	3	1	3	12
St. Paul	100	.	.	1	.	3	9	8	10	16	17	33
St. Peter (the poor-house for the whole city is in this parish, and a cholera hospital was established in 1849, when the cholera was at Bristol)	354	.	.	1	.	.	2	.	1	.	2	332
St. Philip and Jacob	65	1	2	2	3	7	3	5	8	1	5	24
St. Stephen	40	.	.	.	1	2	.	9	6	3	1	15
St. Thomas	24	.	.	1	.	2	1	2	2	5	1	9
St. Werburgh . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Temple	107	.	.	1	2	1	1	4	5	3	4	80
Total from Bristol	1,520	1	4	20	31	54	87	110	111	129	165	733

	Total.	1839	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849
<i>As to other Parishes and Places not in Bristol, viz.—</i>												
Barrow Gurney, Somersetshire	1	.	.	.	.	.	.	.	1	.	.	.
Bathwick, Somersetshire	1	.	.	.	.	.	.	.	1	.	.	.
Berkeley, Gloucestershire	1	.	.	.	.	.	.	.	1	.	.	.
Box, Somersetshire	1	.	.	.	.	.	.	.	.	.	.	1
Brislington, Somersetshire	15	.	.	3	5	.	.	.	.	.	4	3
Cheltenham, Gloucestershire	2	.	.	.	.	.	.	.	.	.	1	1
Cbelwood, Somersetshire	1	.	.	.	.	.	.	.	1	.	.	.
Chewmagna, Somersetshire	1	.	.	.	.	1	.	.	.	.	.	.
Clevedon, Somersetshire	1	.	.	.	.	.	1	.	.	.	.	.
Congresbury, Somersetshire	1	.	.	.	.	.	1	.	.	.	.	.
Frampton Cottrell, Gloucestershire	1	.	.	.	.	.	.	1	.	.	.	.
Horfield, Gloucestershire	2	.	.	.	.	.	.	.	1	.	.	1
Keynsham, Somersetshire	8	.	.	.	1	.	.	.	.	3	1	2
London	5	.	.	.	.	.	.	.	.	.	4	1
Langford, Somersetshire	1	.	.	.	.	.	.	.	.	.	1	.
Long Ashton, Somersetshire	3	.	.	.	.	.	.	.	.	.	1	2
Peusford, Somersetshire	1	.	.	.	.	.	.	.	.	.	1	.
Redland, Gloucestershire	2	.	.	.	1	.	.	.	.	1	.	.
St. George, Gloucestershire	1	.	.	.	.	.	.	.	.	.	.	1
Stapleton, Gloucestershire	6	.	.	.	.	1	1	1	.	1	1	1
Swindon, Wilts	1	.	.	.	.	.	.	.	1	.	.	.
Torquay, Devon	1	.	.	.	.	1	.	.	.	.	.	.
Trowbridge, Wilts	1	.	.	.	.	.	.	.	.	.	.	1
Westbury, Gloucestershire	33	.	.	.	.	3	2	5	7	6	7	3
Wraxall, Somersetshire	1	.	.	.	.	.	.	.	1	.	.	.
Total from other Parishes and Places	92	.	.	3	7	6	5	6	15	11	21	17

Total Number of Interments from Bristol 1,520

Ditto from other Parishes and Places 92

1,612

315. The preceding return, (p. 160,) supplied by Mr. Savery, shows the burials in Arno's Vale Cemetery, since its opening in 1839, distinguishing between burials from Bristol, and elsewhere. Great as are the advantages of this cemetery, and undeniably excellent its arrangements, it will be seen that its advance has been very slow, and that it was not until the approach and presence of cholera rendered the public voice too strong to be resisted, that the authorities within the city, ceased to pile corpse upon corpse in their crowded grounds, and took advantage of the only outlet within their reach.

316. During the inquiry, I visited very nearly every place of interment in the city, in company with the Town Clerk, Dr. Kay, and several other gentlemen. The following are the notes taken on the spot.

317. *St. Augustine's* churchyard is very ancient. Its soil is elevated between retaining walls, and it is full. There are houses on two sides of it, and a privy against the church itself; this is stated to be a great nuisance. A pump and well are placed in the churchyard, but the water is said to be used only for washing. The surface of this churchyard is by no means in a creditable state, and upon a part of it a school has been built. With reference to this, and its subordinate district church of *St. George, Brandon Hill*, Mr. F. K. Barnes, churchwarden, observes:—

“As churchwarden of the parish of *St. George, Brandon Hill*, in the city of Bristol, I beg to bring before your notice, as relating to *intramural interment*, the want of a proper churchyard in the parish of *St. Augustine the Less*, and the evil which arises in consequence to the parish of *St. George*.”

“This latter parish was formed out of, and separated from, the parish of *St. Augustine*, nearly 30 years ago, and a church, and sufficient churchyard, provided for the new district; but part of the arrangement was, that in consequence of the then crowded state of the old churchyard, the new churchyard was to be used as the temporary place of burial of the inhabitants of *St. Augustine's* parish, until the latter parish could procure a new burial-ground. No steps whatever, having, during this long period, been taken by the authorities of *St. Augustine's* parish to procure a new burial-ground, the *St. George's* burial-ground is, consequently, becoming gradually appropriated to the burials of a parish church, which it was originally intended should only be temporarily relieved.”

318. *Christchurch-yard* is in the centre of the old city. It is very small and quite full, and raised high above the floors of the houses. The *White Hart Inn* is built along one side of it, and 40 windows look direct into the churchyard. The surface is strewed with bones. This is the closest of the city churchyards, and, on the whole, the most objectionable. Many of the corpses are said to be only three feet under ground. There are few burials in the crypt.

319. *St. James's* churchyard, though in the midst of the city, forms part of a considerable open space. It is very ancient and very full, but the grave stones are nearly all laid flat. The ground is considerably elevated, and is held up on two sides by retaining walls. The complaints concerning the state of this churchyard were very numerous. The following memorial, addressed to the corporation of the poor, states,—

“The undersigned, living in the immediate vicinity of *St. James's* churchyard, protest against the continuance of burying in our overcrowded ground, and especially cases of cholera. Believing our health and lives to be much endangered by the same, we earnestly entreat you will forward our complaint or memorial to the proper quarters, and do all in your power to remedy the evil we complain of. We remain yours, the undersigned.

“This was signed by the whole of the residents in the immediate neighbourhood, with the exception of three or four, to the amount of from 50 to 60.

“THOMAS LEWIS
JOHN RIPPON.”

Mr. Coles states :—

“The ground is now so full, that to make new graves, the grave-digger has often to bore the ground for a considerable time to find a free spot. The side near Lower Maudlin-street is in the worst state. Here I have seen decayed matter oozing through the wall, and many others, in warm weather, have seen living insects, in the shape of maggots, crawl over the churchyard wall, across the street, and into the dwelling-houses of the inhabitants.”

320. *St. John's* churchyard, opposite the Guildhall, is surrounded by houses. The churchyard of *St. Nicholas* is opposite to the Bridge quay, amidst a densely populated and ill-drained neighbourhood. “The burial-ground,” observes Mr. Hill, “should be abolished as a place of interment. The space thrown open would serve for a *fish market*, and thus relieve the approach to the bridge, which is encumbered with fish-stalls.” The church has a crypt occasionally used, and a very small strip of ground about it. In the midst of the same densely-peopled neighbourhood, is a small burial-ground, known as the *Rackhay*. The surface is much raised; one window of a ground-floor opens into it. It is without grass on the surface, and has a neglected appearance. *St. Mary le-Port* churchyard is small, raised, very full, and surrounded by houses. These houses and an alley are said to be an encroachment upon the churchyard. I found the grave-digger engaged in burning rubbish upon three flat tombstones. There have been only three interments in the last two years.

321. *Redcliffe* churchyard is very considerably raised above the level of the church. This ground, in parts, especially near the church, is extremely wet; so much so, that a pump is used in digging the graves. Near the east end of the church, on the road

de, is a privy for the use of the school children, in a very filthy condition and very wet. Below the north transept is an ancient crypt, very much built up, and disfigured by modern cross walls. Bodies are here buried in the ordinary way, in brick graves. The paupers, not many in number, are buried on the north side of the church.

322. *St. Michael's* churchyard is surrounded, on three sides, by houses, and on the fourth, is supported by a high retaining wall, which is also the wall of the public road. The exudations from hence are said to be very offensive, especially in summer. The yard is very full and much raised. It is crossed by a public footpath. Mr. Hill states:—

“After wet weather the moisture exudes from the churchyard into the street below.”

323. *St. Paul's* churchyard is of modern date. It is in good order, and the reverse of crowded. *St. Peter's* churchyard is small, very full, much raised, and surrounded by houses. On one side, is *St. Peter's Hospital*, the wall of which forms the retaining wall of the churchyard; the surface of the yard is chiefly mould. The situation of this churchyard, in relation to the hospital of the poor, is very bad; an exudation is said to take place into the cellars. The hospital are about 300 inmates; the drainage is directly into the Float; but in the court, near the church, the gutter-drains are defective. This is a bad situation for a burial-ground, and a worse one for a poor-house.

324. The churchyard of *St. Philip and Jacob* is of considerable extent, very ancient, very full, and in a very discreditable state. There is no attempt whatever made to keep the surface decent, and the whole is a nuisance on a very large scale, and affecting a densely peopled neighbourhood. *St. Stephen's* churchyard is old and full, and in a crowded neighbourhood. The cellars of the houses, on one side, extend into it, and there is a public pump in the wall, the water of which is in great repute.

325. *Temple* churchyard is spacious and apparently very full; recently much has been done to reduce the surface to order, and most of the grave-stones have been laid flat. This yard is closely surrounded by cottage tenements of very miserable description, and few windows open directly upon it. The surface is partly grass, partly mould, recently raked. The situation of the place is naturally low and marshy. The vaults below the church are ordered by the churchwarden to be frequently flooded; but the burials are extremely few, not having exceeded four in the last few years. The surface of the ground is considerably raised.

326. *St. Thomas's* churchyard is very full, and in a neglected condition, with upright gravestones. There are numerous windows opening into it. The surface is raised above the floors of the houses, and abuts against their walls. A portion of the ground is covered with bones; exudations are complained of from this yard

into the houses. *St. Werburgh's* churchyard is ancient, and in crowded part of the city. It is overlooked by a coffee-house, Mark-street.

327. The *Baptist* burial-ground, in Redcross-street, is very full and the ground somewhat raised. It is, however, in neat order, the stones having been laid flat, and shrubs planted. This yard is surrounded by houses with numerous windows opening upon the street, some at, and others below, the surface level. Around *Brunswick* Independent chapel are two small yards, very neat and clean, turfed and planted. Only one is in use. The *Unitarian* ground, in Lewin's Mead, is in good order, but the part occupied is very full and the tombstones are chiefly upright; the other portion has not yet been opened. The *Tabernacle Methodist* ground is of large extent, and by no means full. It is partially surrounded by houses. In *Baptist-Mills Wesleyan* ground there are but few interments, the ground is small, open, and kept in good order. *Francis's* private ground, in West-street, is close and narrow, and in a very crowded neighbourhood. It is very full. On one side of it, is a carpenter's shop and timber-yard. The exudations into this yard are complained of, and there is a very offensive drain from the burial-ground into the public street. *Williams's* private ground, also in West-street, is narrow, very crowded, much raised, and in a dirty and neglected condition. It is at the back of a thick peopled neighbourhood.

328. Near Gideon chapel, in Newfoundland-street, is *Howland's* ground, in a dirty state. It is surrounded, on two sides, by houses, is crossed by a path, and is a common receptacle for filth and rubbish. *Thomas's* burial-ground is planted with trees and flowers, and inclosed within a wall, covered with ivy. There are houses on one side only. On the whole, it is in good order. *Dolman's* *Allen's* burial-ground, stands upon a slope, on new red sandstone, close below the wall, is the open drain from Lawrence-hill. One grave is covered with a public ash heap. The *Wesleyan* Churchyard, in Portland-street, is tolerably full. There are houses close to it.

329. The burial-ground of the *Moravians* or United Brethren, in Upper Maudlin-street, is in beautiful order, and, except in being within the town, a pattern for everything of the kind. The ground is well kept, the footways neatly paved, a border of flowers round the yard, the stones are all flat, of uniform size, and uniformly laid. The greater part of this ground is occupied, but it affords a striking contrast to most of the other grounds in the city; the graves are very deep indeed. The memorial of this ancient and orderly body of Christians is given in the Appendix (O), and the statements contained in it are fully borne out by the facts.

330. The *Quakers'* burial-ground, in Redcliffe Pit, is, on the whole, in good order, and neatly turfed, exhibiting very few marks of recent interment. Several back windows, from which it appears

to be the practice to throw house refuse, open upon this ground. The position of the corpses is marked by lateral cross marks instead of tombstones. In this neighbourhood, the ground is very wet. There is water in most of the cellars. Around this ground, I heard complaints of the drainage recently laid down by the Commissioners, the notion being that a bad smell is produced by the state of the sewer. The *Friars* ground, belonging to the same body, is in excellent order.

331. The *Jew's* burial-ground is very small and narrow; house windows overlook it. The soil is marshy, and the whole in a very neglected and dirty state, being used as the back premises of the dwelling-house through which it is entered. *Pyle-hill Wesleyan Chapel* stands in a small yard, containing a few graves. This ground is low, ill drained, and damp, and in a populous neighbourhood; but it is cleanly kept. *St. Matthew's* churchyard is small, open, of late date, and in excellent order; houses, however, are about to be built around it. *St. Jude's* is a new and handsome church, with a small churchyard. *St. Simon's*, also new, has a strip of land around it, very neat, clean, and airy.

332. *Clifton* churchyard is in excellent order, well arranged, laid down in turf, and planted with trees, with a flagged footway and space in front of the church. The crypt is airy and very neat and clean. The condition of this ground is very creditable to the churchwardens and sexton; a commendation that cannot be extended to the *lower burial-ground*, which is in a dirty and neglected state. It is not much used.

333. *St. Paul's* church, Bedminster, is of modern date. It has a small, and but little used, yard, airy, and in good order. *Bedminster Old Church*, with its surrounding yard, stands on low red sandstone, in a high, open, very airy position. The churchyard is very crowded, but is kept neat and clean. There are no houses immediately about it. There were numerous cholera burials here. In *St. Luke's*, a new church, there are few, if any, burials. The churchyard of *Trinity* is open and airy, in pretty good order, and by no means nearly full.

St. John's churchyard (Durdham Down) is small, of modern date, and in good order.

334. During the inspection, I visited the public cemetery in Arno's vale. The spot, though near so large a town, is very secluded and extremely beautiful. It includes a cwm or valley, with steep sides, and is laid out and planted with judgment and taste. A chapel is set apart for the performance of the Church of England service, and the greater part of the ground is consecrated.

335. I called upon Mr. Savery for the results of his extensive experience of mortuary arrangements in Bristol, and, in consequence, received from him a report, a part of which I proceed to quote:

"I now beg to convey to you in the form of a Report, the result of

my observation and experience on the subject of intramural burials in Bristol; and when you have considered this, and visited the different places of interment here, I believe you will be convinced that this can no longer with safety or propriety be allowed to furnish intramural interment to its dead. In all the larger parochial burial-grounds, and in most others, the soil is saturated, and super-saturated, with animal matter undergoing slow decomposition, and in most of the ancient churchyards the ground rises many feet above its original level; testifying to the large amount of putrescence which rots beneath the surface, and I am assured that the rain and land water, passing over these putrid masses, through fissures of rock, &c. often run into adjacent houses, and even infect the wells in the neighbourhood.

“The vaults beneath our churches are also, in many instances, overloaded with materials of putrefaction, and the atmosphere is often tainted with foetid emanations from the dead. For the most part, houses built contiguous to the burial-grounds, preventing even such ventilation as might diminish the evil; and in some of the church-yards, business is carried on, or they are used as public thoroughfares, causing numerous desecrations, obviously at variance with the solemnities proper to places of burial.

“One of the worst instances of this class of churchyards, is that belonging to the parish of St. Michael, the extent of which, including the site of the church, is 2 acres and 31 perches, and the interments therein in the year 1836, were 95, which is, I believe, still about the average. This churchyard is a great public thoroughfare.

“The churchyards of St. John, Christ Church, St. Peter, St. Michael, St. Nicholas, All Saints, St. Werburgh and St. Stephen, are in the *centre of the city*, and quite surrounded with dwelling-houses, and are peculiarly unfit for any further burials. The extent of these eight churchyards, including the sites of the *large churches* thereon, together, only 1 acre, 2 roods, 32 perches, and in them about 1000 corpses annually are added to the previously long accumulating mass of corruption.

“With respect to interments in vaults, which prevail to some extent in this city, but chiefly, I think, in the cathedral, I may observe, that it appears now to be generally admitted, that very erroneous notions have hitherto prevailed as to the preservation of bodies under these circumstances. In the report on the city of London from Mr. Simon states, that, ‘a time certainly comes sooner or later, when every corpse buried in a vault of a church, spreads the produce of its decomposition through the air, as freely as though no shell had enclosed it. It is a matter of the utmost notoriety that under all ordinary conditions, in a vault sepulchre, the wooden case of the coffins speedily decays and crumbles, while the interior leaden one, bending with the pressure of whatever mass may be above it, yields and bursts.’ He continues that ‘It is a very serious matter for consideration, that close beneath the feet of those who attend the services of their church, there often lies a pile of decomposing human remains, and generally, but very partially, confined; and if it be the case, as perhaps it may be, that the worshippers in the quarters of the place of worship do not complain of any vitiation of the atmosphere, or perhaps, do not experience it; not the less is it true that that vitiation occurs, and whether to the special detriment of

congregation or not, contributes to the overladen putrefactiveness of the atmosphere."

"I have no doubt that your own inquiries will show, that all the above valuable remarks of Mr. Simon most forcibly apply to Bristol.

"There is scarcely a vault, under any of the churches, which ought to be used for sepulchre; and the vaults under St. John's and Temple Church, are, I believe, flooded with water."

In the Appendix will be found that part of Mr. Savery's report which relates to the details of the Arno's Vale Cemetery.

336. In relation to a very important part of the question of interments, and one to which I do not find any reference made in the parochial scheme, Mr. Savery states:—

"You are, no doubt, familiar with the valuable report of Mr. Chadwick, delivered to Parliament in 1843, from which it appears, that the estimated cost of funerals in England and Wales, for one year, was 4,871,493*l*.

"The amount contributed by Bristol towards this sum would, considering its wealth and population, be very considerable.

"I do not propose to enter minutely into this part of the question; but I can produce to you a full return of the burial fees and expenses at the several churches and burying-grounds in Bristol, obtained by me in 1836, if you wish to inspect it.

"As a general illustration, however, of this class of expense in Bristol, I will introduce the Table of Fees at one of the churches, viz. :—

In Vault or Brick Grave, the Apportionment Fee for Ground is:—	In ditto ditto, the Interment Fee is—	Making a Total of—
£. s. d.	£. s. d.	£. s. d.
In the Chancel . . . 14 14 0	8 8 0	23 2 0
In the Crypt . . . 12 10 0	8 8 0	20 18 0
In the Churchyard . . . 5 0 0	1 16 0	6 16 0
Common Earthen Grave . . 0 12 0	0 8 6	1 0 6
Monument in the Chancel. 18 0 0	. . .	18 0 0
In the Body of the Church 13 0 0	. . .	13 0 0
Flat Stones in the Church. 3 0 0	. . .	3 0 0
Ledger Stones in the } Churchyard . . . } 0 19 6	. . .	0 19 6

And an additional fee, in every case where the body is brought into the church and prayers read over it, of *l*. 10*s*.

Ex-parishioners, nearly double the above fees.

"At many of the churches, the charges exceed the above, and at some, I find them considerably less. The expense of interments, in the private burying-grounds, is generally low; but this is to be accounted for by the vast number of bodies so improperly crowded in these burial-places."

337. REMARKS.—It will have been evident, from what has been stated in this Report, that the two great evils of Bristol—those to which, directly or indirectly, many of its social, and more of its physical evils, its drunkenness, filth, and excessive mortality, may, in great measure, be attributed, are caused by want of drainage and want of water. The evils of bad roads, crowded houses, ash-heaps,

unpaved yards, slaughter-houses, unhealthy manufactures, nay, even the great offence of crowded burial-grounds, sink almost into insignificance as compared with the miseries of which these two great deficiencies are the cause.

338. A powerless and irresponsible government is as great an evil to a city as to a nation; and the city of Bristol is, as regards sanitary matters, under such governments, and this is one great cause of its sanitary deficiencies. The old city has one governing body, the "District," another, the other parishes, each another; all, though in very different degrees, are wanting in power; all are independent of each other; and all expend the rate-payers' money, without, in some cases, being responsible to the rate-payers, or, in others, keeping proper accounts, or following any rule of expenditure. The city of Bristol, included in one boundary, and so bound up together that one class cannot materially suffer in pocket or person without affecting all, has its expenditure under the control of six or seven independent jurisdictions. While one district is lighted, paved, scavenged, and tolerably sewered, another is badly lighted and imperfectly sewered, another tolerably lighted but without sewers, and others, the most populous and the most disorderly are neither lighted, sewered, nor scavenged at all.

339. Without doubt, the conversion of the Avon into a floating harbour was a great injury to the sewerage of Bristol, that is, of the old, and parts of the present, city; but even the City Commissioners, whose powers of government and of rating, and, consequently, the condition of their division, are far beyond those of the other governing bodies, are quite unable to cleanse courts or to repair roads, which, though called private, are open to all; neither have they any power to direct ash-bins or water-closets to be built; to send a supply of water into, or lay a drain out of, private houses; nor can they prevent any grasping speculator from building cottages in damp places, without back premises or windows, or with the floor below the level of the soil.

340. And, yet, without such powers, exercised by one body over the whole city, no economical or effectual sanitary measure can be carried out. Districts, which ought to be drained collectively, are drained separately; those below making no provision for the drainage from the higher level. The laying down a system of drainage, without plans and sections, is absurd; but there is no complete plan of the whole city on a large scale, no system of levels at all, and no power to rate the inhabitants for an object without which, no outlay can be certainly judicious.

341. Slaughter-houses and knackers' shops, which, however managed, must, at times, be offensive, are allowed in the poorest and most crowded parts of the city, often, with a very imperfect supply of water, and with open cesspools for the blood and offal. Low lodging-houses, the harbours of thieves, prostitutes, and mendicants of the lowest sort, are very numerous, and are neither checked nor

registered. Pigsties, a much less, but a sufficient evil, are permitted, not only in the city, but in crowded courts.

342. No one is responsible for these things. Even where the governing bodies have power, as in the case of a filthy public way, to remove the nuisances, the officer is apt to be more anxious to remove the evil out of his district than to amend it, and, more frequently, "private property" is the plea for a state of things which produces a public nuisance, and consequences to be paid for out of the public purse.

343. Until the same body, who lay the sewers, and maintain and light the roads, exercise over private drains, roads, and nuisances, the same powers that they exercise over those that are public, but little can be effected; and, even such powers will be of small avail unless they are administered by one responsible body over the whole area.

344. Although the want of WATER is, at present, a very serious evil in Bristol, yet as the new Water Company have laid their pipes, and before these pages are published, will, probably, have at their command a most copious supply, which, notwithstanding the heavy cost of their works, they will be able to sell at a cheap rate, it is unnecessary to say more upon this most important head.

345. The condition of the HIGHWAYS deserves a few words. Usually, in England, whatever may be the condition of the parish ways, the turnpike roads, at least, are in tolerable order. In Clifton, this is the case; but in Bedminster, and St. Philip and Jacob, two great entrances into Bristol, the condition of the turnpike roads is most discreditable. They are badly drained, badly repaired, badly scavenged, and the scrapings, instead of being removed, are piled in heaps by the way side, and, in Bedminster, form a bank above a quarter of a mile long, and four to five feet high, said to be maintained for the purpose, at some future time, of raising the road, but which, certainly, should not be preserved in its present place, where it is a nucleus for all kinds of filth.

346. The financial difficulties of the Trust were pleaded in excuse for this state of things; but unless some gross mismanagement has occurred, it is difficult to understand how the roads round a populous city, with numerous toll-gates, should not pay themselves, especially when many of them actually traverse a district whence the best road material in England is largely quarried and exported. It was beyond my province to examine into the trustees' accounts; but the condition of the turnpike roads in Bedminster and St. Philip and Jacob, though it may be accounted for, cannot be defended.

347. The city streets are, of course, paved, but very general complaints were made that they were not always so well scavenged as during my visit. The roads in the "District," also, were, for the most part, in good order; but the parish roads in St. Philip and Jacob (out), with some exceptions, and in Bedminster, are scarcely

deserving of the name, they are so ill drained, and rotten with moisture.

348. But the most reprehensible class of ways are those called "private," being private property, never put in order by the proprietors, and, consequently, not taken any notice of by the public officers. The suburbs of Bristol are traversed in all directions by such private ways; many of them have been streets with a dense population from ten to twenty years, and are a mere trough of mud, into which all the ashes, soil, and house refuse, are daily thrown, and never removed. They are a very serious, and, I fear, an increasing, public evil.

349. The private courts are also very numerous, and in quite as bad a state, since, although they are less cut up by carts, they are usually close and damp, from want of air and ventilation. No reform will be worth much that does not compel the owners of both ways and courts to put them in substantial repair, and then to hand them over to the public.

350. The absence of legible NAME PLATES upon each street, alley or court, is a considerable evil, since it renders it impossible to identify particular descriptions, and, in many cases, disguises the fact of the reappearance of epidemic disease, from time to time, in the same places. The whole of Swansea, with a population of 20,000 was named throughout, and remarkably well done, for less than 50%

351. The want of LIGHTING is another serious and extensive evil. It appears from Mr. Hill's evidence (and I was able to judge of the fact for myself), that parts of Clifton, and parts even of the old city where there is not the excuse of detached houses, are badly lighted, but Bedminster, and most of St. Philip and Jacob (out) are no lighted at all, although they are almost wholly composed of the class of population which most requires the attention of the police. The public officers of these parishes do not seem to be at all aware of the moral effect of lighting a poor district.

352. The price charged for gas by the two great companies who command Bristol furnishes some excuse for the neglect of its use. 4*l.* 4*s.* and 4*l.* 18*s.*, per annum, for public lamps, and 6*s.* per 1,000 cubic feet for gas burned by meter, are prices far too high for a city with coal and limestone within its boundary, and iron at its very doors. If the power of contracting for the whole city were in the hands of one body, no private company could resist its reasonable demands for a reduction of price.

353. The city stands in great need of proper regulations on the subject of HOUSE VENTILATION. This branch of the subject has been totally neglected by house-owners, notwithstanding that great attention has been paid, of late years, to it, in the construction of Schools and Churches. Observing this contrast, I called upon Mr. Barrow for the results of his experience. He states:—

"As a matter connected with the health and comfort of those who frequent our churches and schools, I may state, that the attention c

our architects has been specially directed to the subject of ventilation. There is a decided improvement in this respect in the recently erected buildings as compared with those of the last, and even those of the earlier part of the present century. In such churches as St. Nicholas's, St. George's, Brandon-hill, Holy Trinity, and such school-rooms as the Diocesan school-room (1811), nothing can be more oppressive and unwholesome than the atmosphere after the buildings have been filled for an hour or two; whereas in the new churches of St. Simon and St. Jude, and in the new school-room in St. Andrews and St. Augustine's, in consequence of good ventilation, the air, even at the close of the church services or school duties is comparatively free from impurity. The construction of a church over school-rooms for the children of the poor is extremely objectionable; for, notwithstanding all possible contrivances for air and light, the schools cannot, I conceive, under such circumstances be otherwise than gloomy and ill-ventilated. There is one case of this kind in a populous parish of Bristol, and I have reason to believe that the small and irregular attendance of children at that school may in a great measure be attributed to this faulty construction of the building."

354. It is unnecessary to repeat what has been advanced on the subject of BURIAL-GROUNDS. The absolute necessity for closing the churchyards, and other intramural places of interment, is admitted by all, and the only question now at issue is the best means of supplying their place.

355. One of the great, though, by no means, peculiar, sanitary evils of Bristol, is the miserable condition of its COTTAGE TENEMENTS; and as the condition of the dwellings of the poor was, after all, the moving cause of the Public Health Act, and their improvement that to which its most important provisions tend, it will not be surprising if I dwell at some length upon this subject. There are in the whole city 6,511 houses rated at, or under, 5*l.*, and 12,306 at, or under, 10*l.* rental; being 54·8 per cent. of the whole, and containing, in many cases, more than seven inhabitants to a house, six being the average throughout the whole city.

356. In speaking of these houses as a class, it is not too much to say that they are built in the worst situations, in valleys or low grounds, along the banks of rivers; that many of them are in a ruinous condition, without any, or with but one, back window often with no back yard; sometimes, with only a public, and almost always, a very dirty, privy. Where there are back premises, they are seldom paved, never have an ash-bin, are not inspected, and in some of the largest districts, never have their ashes removed by the scavenger. They are seldom drained, and never efficiently so; almost invariably badly supplied with water; their floors are commonly below the ground level; and three or four of the most populous districts are without any street lights, public or private.

357. Many of the cottages have been erected by builders and small middle-men, on speculation, of a size and condition to harbour such occupiers as shall be excused rates on the score of poverty,

and with a view to an immediate money profit, without the slightest reference to the health or comfort of the inhabitants. In consequence, the houses are built first, and the roads, footpaths, and drains are left unmade, and uncared for. The local governments cannot force these additions, and, of course, decline to take charge of the roads. Though teeming with population, they are not "public," and, therefore, these cottages, in addition to their internal discomforts and causes of sickness, are allowed to stand in unpaved and undrained highways, which, as has been shown by the experience of Preston and other large towns, sensibly affect the mortality, and materially increase the difficulty of keeping the interior of the houses clean and comfortable.

358. The Clifton Public Health Committee observe upon this general subject,—

"It is hardly, perhaps, within the province of your Committee to comment, or to offer suggestions, upon the painful details of physical and moral evils which have thus fallen under their observation. They cannot, however, shut their eyes to the obvious fact, or refrain from expressing their conviction, how utterly useless must be any attempts, however judicious or persevering, to inculcate habits of cleanliness or decency, or to effect a moral reformation among so large a mass of their poorer fellow-citizens, whilst thus lamentably circumstanced in reference to their dwellings, structural arrangements, and supplies of water."

359. Those who are disposed to doubt, and, if they have no personal knowledge of the subject, they well may doubt, the correctness of so gloomy a description, will do well to visit the Hotwell-road, Woodwell-lane, and the courts behind College-street, Lewin's-mead, the courts west of St. James's Church, some of the 3,776 cottages in the out parish of St. Philip and Jacob, or of the 2,310 in Bedminster. A walk through the back lanes and alleys, and into the courts of these districts, with a fever or cholera list for a guide, will undeceive everybody who has not an interest in the abuse. After such a walk, the visitor will cease to be surprised that 250,000*l.* should be spent annually in intoxicating drinks, or 45,000*l.* in the relief of the poor. He will see almost a sufficient excuse for the first, and ample cause for the second. "If," say the Committee of the Sanitary Association, referring, in 1848, to the sickness and mortality caused by this state of things,—

"the thought of the sorrow and destitution inflicted by this excess of mortality, with its accompanying proportionate excess of non-mortal sickness, and all the vice and misery connected with their causes, fail of itself to excite efforts at improvement, a consideration of the costliness of this state of things may supply to some the necessary stimulus. Any exact calculation of the extent to which our poor-rates are burdened from these sources, and the funds of charity wasted, cannot, at present, be ventured; but some notion of the pecuniary loss, thus entailed, may be gained from the single fact that, during the past year, the cost of pauper relief

administered to 700 widows, children, and orphans, at St. Peter's Hospital, was 1,565*l.* 17*s.* 3*d.*"

360. I find, in the work of a modern writer, the following very apposite remarks upon what he calls the "reproductive gifts," which benevolent and sensible persons of the class of employers might bestow:—"In this class of benefits that which holds by far the first place is home accommodation. I have no doubt that ever since the change of manners which the ending of slavery and feudality gave rise to, the want of house accommodation for the poor has been their greatest drawback, and the deficiency can hardly be overrated. Dampness, uncleanliness, want of means for storing and preserving food, and insufficient sewerage, in a habitation, are all immediate causes of pecuniary loss. But the indirect losses are here the greatest. Who can estimate how much money is spent for the enjoyment of the clean sanded floor, and comparative comfort of the pot-house, which might be had so cheaply at home? In improving the house accommodation of the poor, you spend something which anticipates expense, and do a good which cannot well be taken away. Wages are said to vary according to the price of sustenance, according to the demand for labour, according to the increase of population. It may not be in your power, except indirectly, to affect these great currents of human prosperity and adversity; but raise the style of house accommodation, and you will do a solid good which lowering of wages cannot depress."—(F. in Council, ii. 107.)

361. In the midst of all this rottenness, there is, however, one sound spot which promises success to any extensive and judicious attempt at amendment. With comparatively very few exceptions, the interiors of these cottages are clean, or, at least, there are evident symptoms of a struggle against filth. This does not apply to the low lodging-houses, or to the Irish quarters, but it is true of the mass. I heard it frequently said during the inquiry, and it is a common opinion, that the poor are wedded to dirt. This notion is false, and it is, therefore, mischievous. If it were true, the case would be desperate, as the selfish interests of a particular class are apt to mislead them to believe it to be. Certainly, where no back premises, privies, drainage, or water supply are provided,—where there are no back windows, or such as will not open,—where the neighbours keep pigs, horses, or a slaughter-house, and the lane or street is neither paved nor cleansed,—the interiors cannot be otherwise than close, damp, and unhealthy; but even under such circumstances the house refuse will be found to be carried out of the house, the floor to be swept and sanded, and attempts, often indeed very unsuccessful ones, will be made at cleanliness. This is true of nearly 50 towns in all parts of England which I have inspected officially since the commencement of the cholera, and it is emphatically true of Bristol.

362. Who is to blame for all the state of filth above described? Everybody, except the occupant. The local governments chiefly, because, from their position, they ought to have taken a general view of the question, to have numbered the evils, and to have dragged them before the public and the Legislature until they gained the powers without which it was clear they could do nothing. The consequence of this want of power, and of the system of excused rates, has been, that individuals have been allowed to speculate unchecked in cottage building.

363. The owners of house property deserve also a full share of the blame, for they are the class who have perpetrated these abuses for gain, and who steadily oppose any amendment of them. As a class, they are perhaps more out of the reach of influence than any other. They are too high to suffer materially from the evils they create, and scarcely high enough, or sufficiently educated, to feel much shame from the exposure of their neglect of duty, and they are too near the condition of the poor to feel any great sympathy with them.

364. Any censure upon a class must, of course, be unjust to individuals; and I am happy to say, that I have met with some in Bristol who are exceptions to the rule; but, as a class, the cottage owners strongly object to any interference between the landlord and his tenants. They appeal to the law to secure the use of their property, but they will not allow it to check its abuse. So long as they abstain from force or fraud, they hold that society has no business to interfere. And yet, surely, "it is a matter of public concern that our great towns be not injured at the discretion of every individual speculator, who runs out street after street, row after row, of houses, till the working man, in the heart of the town, can neither breathe fresh air, nor find any open ground within his reach on which he may venture without being guilty of a trespass." Even, if there existed no higher considerations, the amount annually of excused rates, and of poor's rates, a heavy mortality and an excessive proportion of epidemic disease, are, surely, ample grounds to justify the most extensive interference.

365. The parochial clergy, and the medical men, are, from the nature of their duties, likely to form correct opinions upon the conduct of the cottage-owners towards their tenants. I took occasion accordingly to mention the subject, and from one of the most active and experienced of the parochial clergy I received the following statement:—

"It is to be feared that there is but too little sympathy with the troubles of their poor tenants on the part of the owners of the houses in which they reside, and for which they generally pay a very exorbitant rent. During the cholera visitations in 1831 and 1849, the persons who were most unwilling to assist in the improvement of the dwellings of the poor and the relief of their wants were the proprietors of the very houses in which the sufferers resided. There are two large houses in one of my

parishes inhabited by more than 60 very poor persons. During the recent outbreak of cholera they were most filthy; but it was only by the threat of 'notices under the Act,' and not until premonitory symptoms had shown themselves in these very houses, that the proprietor—or they were the property of one individual who was receiving out of them a rental far exceeding the rent of larger houses in a better situation—could be induced to aid in their purification. When the cholera was raging in my parish, and the parochial committee were recommended by the medical staff to prevail on the inhabitants of some of the worst houses in the district to remove for a time to a place of refuge, it occurred in two or three instances within my own observation that such removal was opposed by the proprietors through the fear of losing a week or fortnight's rent. When the cholera was abating, and the committee was relieving the poor, under the advice of the district surgeon, with food, bedding, and clothing, I applied to the proprietor of eight houses in which the disease had been most malignant for a subscription: this person, who was a man of wealth, station, and reputed philanthropy, gave me, but not without some hesitation, the sum of *ten shillings!*"

366. The visitors of the Public Health Committee, comprehending two physicians, observe, upon this same subject—

"So long as rents can be collected from the wretched tenants of these miserable abodes, no matter what may be the sufferings or privations of their inmates, so long will landlords leave them to be occupied without a wish or an effort to effect any amelioration in their condition. Nothing short of compulsory legislation of the most stringent character can effectually deal with the *lodging-houses*, let and underlet by parties scarcely removed in condition from the squalid beings seeking a nightly shelter under their roof."

367. I do not wish to assert that the owners of cottage property, as a class, are worse than other people; but they are placed in a position in which they think,—in my opinion most erroneously,—that their interests are opposed to those of the poor, and they are careless of the expense thrown on the community, on a share in which much of their property is exempt. For such house property, also, no one is responsible. It is in Chancery; the landlord is a minor, or poor and in debt, or possesses only a life or leasehold tenure of the land; and it seems to be an admitted fact, universally acted upon, that the ground landlord,—who, in the worst district in Bristol, is a person of large possessions, and in another nearly as bad, an Ecclesiastical Corporation,—is altogether irresponsible for what happens upon the property.

368. The ground landlord, where his possessions include a considerable tract, might insist upon much in the leases; but the cottage landlord, even if he were willing and possessed capital, cannot always supply *complete*, though he always may *partial*, remedies. Thus he may build a privy, and, in Bristol, lay on water; but where there is no public sewer, he cannot dispense with the cesspool or drain the premises; neither, where there is no scavenger, can he be expected to convey the ashes and refuse to the town end;

and all this, though it never justifies, is a considerable extenuation of, the existing state of things. Under the present system, a landlord, who is passive and acts in routine, is sure to be the owner of filthy and unhealthy tenements; were a proper system established the same man would own clean and healthy tenements.

369. The grand defect, and the parent of all others is this want of power, on the part of the local government, to interfere. At present, whatever may be the desire of the upper classes to raise the condition of the people, they can attempt it only by private visitings, charities, schools, and religious instruction; but their exertions are checked, at every step, by an appeal to the condition of the cottages. "The drain is bad and the landlord will not repair it; there is no privy, and he will not build one; the children have caught cold from fetching water in wet weather; the wife has the rheumatism or fever from the damp state of the house or the husband says the smell is so bad he cannot spend his evenings at home." This is the evidence of every quarter in which district visitors exist, and especially in Lower Clifton, which has been long and sedulously so visited. The poor would willingly pay an extra penny or twopence upon their weekly rent if they could have a water supply at home, or a decent privy and efficient drainage; but they are unable, and their landlord is partly unable and partly unwilling, to incur the whole expense of the first outlay in the remedies.

370. There was a time when the great merchants of Bristol, the Canynges, Colstons, and Whitsons, regarded their wealth as a source of trust for the well-being of their city; and by their schools, almshouses, churches, and conduits, provided for the nurture of the young, the support of the aged and broken, and the religious teaching and personal cleanliness of all: and thus, if they could not remove poverty altogether, rendered it more tolerable. In these degrees, these ancient institutions were neglected: they did not keep pace with the wants of a city widely extended, and a population prodigiously increased. Bristol felt severely, on one memorable occasion, under circumstances of great political excitement consequences which may in great measure be attributed to their having allowed a large population to grow up in ignorance and to live in dirt and discomfort. Since that event, probably in some measure in consequence of it, much has been done, as is shown in this Report, for the education and religious teaching of the labouring classes; but their social wants still remain to be provided for and it is, now, for the citizens of Bristol, looking back to the large experience afforded by their own city, to support zealously and to its full extent, the carrying out of the Public Health Act and not to rest until every house in their municipal area is furnished with a water supply, drainage, and decent house accommodation and conveniences.

371. I have received from the Highway Board of St. Philip and Jacob (without), the following document:—

“ 1. A letter, addressed by the Chairman to the Inspector appointed under the Public Health Act, was read, and the contents, as far as the knowledge of this Board extends, being correct; it was resolved, that he be requested to forward the same to the Inspector, and that the Committee appointed at the last meeting of the Board, consisting of the Chairman and Messrs. Jones and Davis, be requested to attend the Inspector, on the 13th instant, and represent to him, that whilst this Board agrees that several of the objects sought by the Public Health Act will be better carried out by the Town Council, it is unanimously of opinion that such would not be the case with regard to the repair of the highways, the making of the sewers, and keeping them in order, and lighting the parish; but that the latter objects would be cheaper and better obtained by a Local Board, and that the Committee be directed to press the following particulars upon the Inspector’s attention:—

“ 2. That this parish was added to the City by the Municipal Corporation Act, and formed into a ward, and, in 1841, contained a population of 21,426; that of the whole City being about 124,000.

“ 3. That the proportion of the borough rate with which the parish was last charged, was 867*l.* 0*s.* 7*d.*, the whole of the rate being 10,000*l.*

“ 4. That the number of elected Town Councillors is 48, out of which only three are elected by this parish and ward. Thus, its population is above 1-6th of the whole City; its contribution to the rate 1-12th ditto; its share of the representation 1-16th ditto.

“ 5. That with regard to sewerage, the parish has no connexion at all with the City, except through the Frome; and that the sewerage, which enters the parish from the City, has a special provision for its exit through the culvert.

“ 6. That the transferring the duties above named to the Town Council would, in effect, deprive the parish of all control over them, which a reference to the small share it has in the representation in the Town Council will prove; in addition to which, the considerations which hitherto have (and always will) influence the choice of Town Councillors, will operate to prevent any inhabitant of the parish being chosen a Town Councillor.

“ 7. That part of the sewerage of the parish of St. George will find its natural vent through this parish.

“ 8. That the turnpikes within the parish are felt to be an oppression to the parties interested.

“ 9. That in any provision for lighting, those parts of the parish, not built upon, ought not to be subjected to the cost of being lighted; nor ought mere courts, without thoroughfares, to be lighted, unless they contribute a fair share of the cost.

“ 10. That there is no means, at present, by which newly laid out streets can be compelled to be put in order, and such of them as prove to be useful to the public become in consequence real nuisances.

“ Copied from the Minute-book of the Board of Highways of the parish of St. Philip and Jacob (without), Bristol.

“ GEORGE CHICK, *Clerk to the Board.*”

372. It is impossible that I should concur in this representation.

If the highways, sewers, and lighting be excepted from the Public Health Act, it is difficult to say what, except control over the water supply, would remain; and, certainly, to have, as the Highway Board proposes, so mixed a government, would make matter worse instead of better.

373. The *exception* as to sewerage, mentioned in the fifth paragraph, contains really the whole matter. The drainage of St. Philip through the Frome is the very point to which the City has most cause to object, and which it should have power to prevent.

374. The law has already decided, and, surely, on very just grounds, that lands within a parish shall pay a share, one-third towards the lighting rate. The case of St. Philip is hardly one to form an exception.

375. The evil of private streets, complained of in the 10th paragraph, is one for which the Public Health Act affords, or may be made to afford, a remedy.

376. In my account of the City, I have, on the whole confined myself to the description of existing evils, and to the means of removing them, and I have avoided, as far as possible, passing censure upon individuals and public bodies; but I must here remark, that whether from want of power, or from whatever cause, the present condition of the out parish of St. Philip and Jacob as to roads, sewers, water supply, scavenging, and offensive trades, is worse than any suburban district, excepting Bedminster, of any city with which I am acquainted, and proves, beyond reasonable doubt, that the present parochial government is very defective indeed.

377. While stating this much, which I cannot, with a memoria of this nature before me, abstain from stating, I am bound to acknowledge that from the members of the Highway Board I received all the information and assistance I required at their hands during my inspection.

REMEDIES.

378. I have thus, according to the instructions of your Board endeavoured to represent the existing state of the City of Bristol as regards the matters included within the scope of the Public Health Act; and, I trust, that what has been stated will be sufficient to show the necessity for the application of that Act in the present instance. Having pointed out the defects, it seems incumbent upon me, not so much for the information of the General Board as for that of the rate-payers of Bristol, and for the guidance of the future Local Board, to give a brief outline of the remedies which I have to recommend, and which the Public Health Act will place within their reach. More than an outline I am unable, without complete surveys and sections, to give; but the data, within my reach, are quite sufficient for this purpose; which is, moreover,

all that seems to be required in a Report upon a preliminary inquiry.

379. Bristol is by very much the most populous place which I have been directed by your Board to inspect; and it is also the only place, among those of any magnitude, in which the inquiry has been actively supported by every public body, (and there are many,) by the Bishop and all the resident parochial clergy, and by the citizens at large, without distinction of party or sect. I can say, with literal truth, that throughout the whole of a long and tolerably searching inquiry, I have not met with a single instance of active opposition. There appears to prevail a strong conviction of the insufficiency of the present system, and an earnest disposition to support a judicious and economical application of the remedies provided by the Public Health Act. A spirit, so free from faction, promises well, should the Act be applied, for its future administration; and serious as are the evils, discomforts, sickness, and expense, at this time rife in Bristol, there can be no doubt that the Public Health Act, if well administered, will bring about the removal of many, and the diminution of all.

380. The Rural Dean, at the close of a very elaborate statement concerning the present condition and wants of his deanery, of which I have already largely availed myself, adds—

“In conclusion, I do most heartily congratulate the citizens of Bristol on the prospect of legislative measures which will tend to the improvement of the sanitary condition of our city. Whatever may be the cost of the requisite alterations of streets and houses and sewers, and the disinclination of men to be controlled in matters which, on a superficial view, may seem to be of a private, personal, and domestic nature, I feel confident that a few years’ experience of the improved habits and comforts of the poor, and the more healthy condition of the whole community, will quite compensate all but the extremely selfish for any present sacrifice they may be called upon to make for the purpose of effecting so much good.”

381. The Act directs that the Town Council shall be the Local Board of Health for the City; and this body will at once take the control over all of what may be called the engineering expenditure of the whole municipal area. In this Board will be vested the roads (excepting turnpikes), sewers, gas-lighting, scavenging, watering, inspection and removal of nuisances, regulation of low lodging-houses, control over slaughter-houses, knackers’ shops, pig-styes, and other similar nuisances to be provided against in the bye-laws. Its responsibility will be very great, and cannot be shifted. If things are not well managed, it will not be a question, as at present, of want of power, mixed boundary, or clashing jurisdictions. The Local Board will be responsible for all one large class of operations and expenditure, superseding, for sanitary purposes, all Local Acts and parochial administrations and ratings. The public possess one excellent check over

such a body. Every man can judge how their functions are discharged; and this alone is likely to secure a proper exercise of them. The powers of self-government confided by this Act to the citizens of Bristol are far larger than they have ever possessed or, I believe, than have ever been granted to the inhabitants of any city under any previous Act of the Legislature. They are limited only upon the point upon which local governments have been found to fail; they are unable, *on their own authority*, to expend more than their annual income, or to burthen the city with a debt. It is only necessary to look round at the vast debt incurred in perpetuity by the governments of Liverpool, Manchester, Exeter, and of most cities, and even towns, and not to see the advantage of this limitation.

382. A powerful local government cannot, it is true, make employment plentiful, bread cheap, or spirits dear; but it is in its power to give water in abundance and cheap; to secure complete drainage, public and private; to pave, cleanse, and light all streets and courts; to forbid grossly offensive trades; to regulate lodging houses; and to allow no house to be built, rebuilt, or substantially repaired, without compelling the owner to provide dry floors, good drainage and ventilation, decent house accommodation, and, in fine, those blessings of water, air, and cleanliness which are beyond all the drugs in the Pharmacopeia; to do much at present, and more in future; so that, by degrees, the condition of the cottages of the labouring class will afford no excuse for visits to the public house, and there will be a solid ground for hope that the poor will exercise that prudence, which, if it be not absolutely inseparable from cleanliness, is yet never found amidst filth.

383. The first great remedy will be the placing the whole city under one jurisdiction, and investing the Local Board with the requisite powers, financial and executive.

The Local Board should, as soon as possible, obtain a survey of the municipal area, upon a large scale, so as to include every house or permanent structure; and this should be accompanied by a complete series of levels, referred to a common datum. Until this at least be done, it will be impossible to lay down any well-regulated system of sewerage, or to form any precise estimate of its cost.

384. The proceedings of the Water Company render it unnecessary that I should dwell upon the important topic of WATER SUPPLY. Their pipes are laid, or will shortly be laid, throughout the whole of the City; and it will be only necessary for the Local Board, when its sewers and house-drains are about to be executed, to call upon the house-owners, or the Water Company for them, lay down the service-pipes, using their power, as guardians of the general expenditure, to confine the Water Company within moderate charges.

385. The water question being then virtually, and, looking to the

present conduct of the Company, it may be hoped, satisfactorily settled, it will be necessary in the next place to provide SEWERS, at this time the great want throughout the city.

386. The sewerage and drainage of Bristol have been the subject of many Reports, and not a few partial experiments; but the subject does not appear ever to have been treated as a whole, all the designs having been directed to the removal of particular evils. As this partial method of treatment appears to me to have produced and perpetuated the present evils, I shall be pardoned if, in endeavouring to avoid this error, I enter into the subject at some length.

387. A very considerable portion of the City of Bristol is admirably situated for sewerage, since it is not only high as regards the outfalls, but the surface is broken up by subordinate hills and valleys.

The principal difficulties are presented by the intervention, between the higher ground and the river, of the Floating Harbour, and a tract of low land, little if at all above high water. This low land, in consequence, suffers occasionally from the river, and continually from the land waters from above, in addition to its proper share of rain water. These tracts must be relieved from all extraneous waters, at the same time that measures are taken to drain them of their own.

388. Hence it is essential to the success of any system of sewerage for Bristol, not only that it should be general, but that it should provide for the high level and low level sewerage, that is to say, *for the sewers that can be discharged at or above, and for those that must be discharged below, high-water mark, separate outlets*; and it is equally essential that the trunk sewers should be combined with house drains from each tenement, and with a constant water supply over the head of each house-drain.

389. If these points be attended to, the arrangements and levels of the sewers will be the best the ground admits of, and the advantages produced by them will be universally extended. The low levels will not be laden with the upper sewage, and will be more easily drained; the expense and inconvenience of re-opening the ground and cutting into the street sewers will be avoided; and the use, for house drainage, of stone-ware tubes, smooth within, impervious, and of moderate diameter, will be rendered practicable, and, as a general consequence, the expense, both of construction and maintenance, will be materially diminished.

390. It is also essential that no sewers be laid into the Float, the Frome, or their tributaries, or into any open watercourse; and it is scarcely less important, in an economical point of view, that the outfalls should be so arranged as to admit of the employment of the sewage, for agricultural purposes, when required.

391. I proceed also upon the assumption that house cesspools, under whatever form, and however constructed, will be forbidden; so

that fluid refuse, of every description, will be discharged at once into a drain, and will flow forwards, without check, until it reaches the main sewer and the outfall.

392. It is also highly desirable, and I strongly recommend the application to Parliament for the inclusion in the Act confirmatory of the application of the Public Health Act, of general powers to carry main, that is, street sewers, through private property, under the usual provisions for compensation. Without such powers, it will be scarcely practicable to secure for the sewerage the lines of greatest convenience, best fall, shortest length, and least expense.

393. The present sewers are of considerable area, and, excepting where within reach of the tide, are never full. When sewers are combined with a constant water supply in the house-drains, they are far less liable to become choked, and may very safely be of much smaller dimensions; 10 and 12 inches diameter, for example, will be sufficient, with a good fall, for the branch sewers, instead of 18 inches and 2 feet, or even 3 feet, as at present constructed.

394. The dimension of many of the sewers must, however, be suited for the removal not only of house drainage, but of surface water. In the branch sewers, where the fall is usually good, the increased dimension need not be considerable; but with the trunk sewers, lying low, and, therefore, discharging slowly, the case is different. Fortunately, however, all these sewers may be placed at no great distance from natural watercourses, into which, rather than into the sewers, the gutters should be directed. By this means the main sewers will be much relieved, and may be reduced in size; and still the washings, so valuable as manure, of all but the lowest streets, will be preserved, and led to the common outfall.

395. Hitherto, it has been the custom to regard the watercourses as the natural sewers, and, where it could be afforded, to arch them over, and to employ the water, by penning it back, in flushing the sewer. Such arches are very expensive, and the vault, in dry seasons, becomes filled with gas, and gives out offensive odours. Under the proposed system, the watercourses will not receive any sewage, and may, therefore, be left open; or, if arched for public convenience, will not be sources of offensive smells.

396. But while thus arranging for the more rapid discharge of surface waters into the watercourses, it is necessary to provide improved outfalls for the latter. For example, both the Frome and the Cutlers'-mills Brook should be straightened, the sides walled, and the bottom laid in an invert; by this means the channel will be kept clear, and all the spongy ground upon its margin would at once admit of being tile-drained. It has been proposed to arch over the lower Frome, and thus to form a road through some of the worst parts of the city—a very good plan, provided that, in the first place, every sewer were carefully excluded from the vault.

397. In the present section, I contend for the mechanical and

sanitary advantages of this system ; the expense to be incurred by its adoption will be discussed under its proper head.

398. Having premised thus much, I proceed to state the general features of the plan that I propose for the complete sewerage of Bristol ; but although the aid afforded by the Paving Commissioners, who very handsomely enabled me to avail myself of the services of Mr. Armstrong and Mr. Ashmead, has furnished data for the *general* course of the sewers, and for the minimum fall of each, I have been unable to determine the number of houses, or the area, which would drain into each, or, consequently, to calculate its exact dimensions. I mention these points because, though sure of the general correctness of the plan, I am not in a position to defend its details, even were it requisite in a Report upon a preliminary enquiry only.

399. The *main sewer*, which it will be convenient to describe *first*, will commence at White Ladies'-gate, be carried along the high road to Tyndall's Park gate, and thence by Berkeley-place, Woodwell-lane, and Limekiln-lane, to the end of College-street, on the edge of Canons'-marsh, where it will meet the main sewer from St. James's.

400. This sewer, by its branches, will drain the whole of the valley as high as Clifton Park, the Zoological Gardens, the edge of Purdham Down beyond St. John's, much of Redland, and much of Cotham ; besides receiving such existing branches as will fall into the trunk between White Ladies and Limekiln-lane, of which the most considerable descends from Clifton church. At present, the whole of the above area, north of Claremont-place, drains eastwards into the Cutler's Mills-brook and the Frome, and tends to swamp the low districts. By the proposed plan, it will be conveyed away directly, by a short cut, towards the Avon.

401. The *second main sewer* will commence near the Cutler's Mills'-gate, pass along the high road, through Stokes Croft, Cherry-lane, West-street, between the Infirmary and St. James's Church, by Johnny Ball-lane, Trenchard-street, Frog-lane, and College-street, where it will unite with the sewer last described.

402. This sewer, by its branches, will command the Horfield-road, the whole of Kingsdown, St. Michael's, Park-street, and College-green ; a branch from Montpellier will cross the valley, raised about eight feet in the embankment of a proposed road, pass between Ashley-place and St. Barnabas Church, and traversing Jefferies-gardens, reach the main sewer, at the end of Loon-street.

403. The combined trunks, at the end of College-street, will terminate in an iron pipe, which should be laid across the marsh, beneath the Float and the island, discharging into the New Cut, below Cumberland-terrace.

404. These two sewers, it will be observed, are "high level," that is to say, they are laid only to suit those districts which admit of

being drained above high-water mark. Of course, after leaving College-street, there will be a slight pressure on the pipe, and therefore, it cannot be employed for the removal of any sewage from districts below high-water mark.

405. *Another high level sewer* will commence north of Lebeck's gate, cross Penny-well-lane, traverse George's-street, and the west end of Redcross-street, and thence, drifted through the ridge, take the course of Carey-lane, St. Philip's-plain, across Cheese-lane and Little Avon-street by Avon-street and the Marsh-bridge, to the Avon above Calcraft Lock.

406. Near Carey-lane, this trunk will receive a sewer from Castle-green, and the high and central part of the Old City, and on reaching the plain, a second branch from Lawrence-hill by Waterloo-house and Unity-street. From near that point, it will dip into an iron pipe to cross the Vain valley, receive a branch from the high land of the Dings, and its course thence will be beneath the feeder in the direction already described.

407. These, then, will be the principal high level sewers. There will be a *smaller sewer* in Redcliffe, from Hill's-bridge to Harford's-bridge, to receive the branches from the high ground from Redcliffe Church to the Bath-road, and another, of greater extent, in Clifton.

408. *This latter sewer*, as a trunk, will begin on Clifton-hill, descend Clifton Vale nearly to Trinity Church, cross above the Hotwell-road or Love-street, by Dowry-square, above the Gloucester Hotel, to Rownham Ferry, whence it will be led along St. Vincent's Parade to discharge into the Avon, some way below the Hotwell-house.

409. This sewer will, by its branches, drain Victoria-square, Rodney-place, and the east end of the Creseent. It will also receive a branch from the Polygon, Lower Crescent, and Granby hill; and below St. Vincent's Parade, it will intercept the sewer from Windsor-terrace, the Paragon, the Mall, and Sundon and Camp houses, which, at present, enter at numerous points above low water, and create a nuisance. As this will be also a high level sewer, it will not receive the sewerage of the houses about Rownham Ferry, or along the Parade.

410. The sewers, above described, provide for the free discharge at all states of the tide, of all the districts that admit of being drained. The other class of sewers will drain those tracts whose levels do not admit of drainage at, or above, high-water mark, and which will, therefore, have their outfalls locked up during certain states of the tide.

411. Clifton will require *one low level sewer*. This will commence at Mardyke, take the line of Grenville Chapel and Caroline place, and proceed, by St. Vincent's Parade, to an outfall beyond the Hotwell-house. This sewer will drain the flat near the Ferry and St. Vincent's Parade, and will intercept a multitude of sma

drains which, at present, discharge into the Float, or in front of the Parade, and have already been described as a nuisance. The details of the outfall will be noticed afterwards.

412. A *second low level sewer* will commence at Mardyke, and run eastward, draining the lower courts about the gas-works, and terminating near College-green, where it will meet with a sewer from the Butts, Trinity-street, and lower College-green; the trunk sewer will, like the high pressure sewer, be led, through a culvert, under the Float, into the river. The two trunks, though not communicating, may be laid together.

413. The *next* is a *sewer* of far greater length and importance. It will commence on the north side of the Frome, as high as Baptist Mills, will intercept all the low sewage below the upper sewers, and will take the course of Broadmead, Nelson-street, and Gray-street, crossing the Frome in a pipe, receiving branches from Union, Merchant, and Philadelphia Streets, and, finally, it will discharge into Mylne's culvert, at the entrance to which it will be joined by a branch from St. Augustine's Parade and Host-street. By this means, the whole of the low levels, north of the Frome, will find a passage into the tidal river.

414. There must be a *corresponding sewer* from Baptist-Mills, on the south bank of the Frome, intercepting the sewage from the strip between it and the upper sewer, and like the upper, turning southward, through the ridge near Castleditch, and thence superseding the present Bread-street sewer, and intercepting the sewerage of the Vain valley.

415. Besides, there will be a *low level sewer*, receiving the drainage of Temple and St. Thomas's parishes, and carried through Redcliffe-hill into the tidal river.

416. There remains *Bedminster* to be considered. The whole of this part of the city, with the exception of a not very considerable tract about the Old Church and North-street, and on the spoil bank upon which Dean-lane stands, must be treated as low level drainage; and while the channel of the Maligo should be straightened and deepened, the sewers from the tracts on each side of it should be united, and led through the banks into the New Cut.

417. As the whole of these low level sewers will only discharge effectually when the tide is below about three-quarter rise, it will be necessary to provide for the effectual drainage of the district when the tide is above that level, either by increasing the diameter of the lower ends of the sewers, or, perhaps, better, by causing each to discharge into a domed well or tank, of proper diameter, as deep as low-water mark, and capable of containing, at a proper level, all the sewerage of its district, during the period when the outlet is closed by the tide. These should be constructed by the river side, with a pipe from the bottom, opening into the river below low-water mark, and fitted with a valve opening outwards.

418. When it is found desirable to employ all the sewage as manure, the high level outfalls must also be fitted with wells, and the whole series connected by iron piping with one, or probably two, pumping engines.

419. It should be understood, that the only use of a pumping engine will be for the removal and distribution of the sewage as manure. The whole of the city of Bristol can, by the means described above, be thoroughly drained, and its sewage removed by its natural flow.

420. It is unnecessary that I should here refer to the HIGHWAYS, which, when vested in one Board, will be maintained more economically, and in better order. The subject of *private roads*, already noticed as an evil of great magnitude, seems, however, scarcely likely to be remedied to its full extent, unless the proviso attached to section 70 of the Public Health Act be dispensed with.

421. HOUSE ACCOMMODATION.—Under this term are included all those points in which the dwellings of the labouring classes are almost invariably deficient, and which it will be within the power of the Local Board to compel the house-owners to provide.

422. These are, principally :—

1. A service-pipe and taps, and the laying on, by this means, a constant and unlimited supply of water.
2. The construction, or conversion of the privy into a water-closet, such as is in use in most gaols and Union-houses and in many large manufactories.
3. A stone-ware tube-drain from each house, court, and water-closet, trapped, at each junction, to prevent the escape of gases, and provided with sinks beneath each water-tap.
4. The filling up of all cesspools, removal of pig-sties, open ash-pits, and bins for the stowage of manure.

423. If, at the least these, “house accommodations” are not provided, the inhabitants of a house cannot, by any efforts, keep it clean and sweet or healthy; and the direct consequence will be an increase of the poor-rate, which the owner of the property, the condition of which causes the expense, is frequently, on the very plea of that condition, excused from contributing to.

424. In the case of new, or rebuilt houses, there will be no difficulty in insisting upon proper accommodations; with respect to houses now standing in crowded situations, the case is less simple. Here, discretion must be used. If there be no space for a water-closet for each tenement, one must be provided for every two. Still, the effect of introducing the complete system where it is practicable, will be to draw a strong line between the comfortable and uncomfortable, the healthy and the unhealthy tenements, and this distinction the Local Board ought to encourage and proclaim.

425. It should be steadily borne in mind, that, after all, the im-

improvement of the labouring classes, by the introduction of the above accommodations, is the great end proposed to be carried out by the Public Health Act, and that to which, under various pretexts, there is invariably most opposition; chiefly for this it is that unusual powers of interference between landlord and tenant have been granted to the Local Boards, and that the system of main sewerage will be planned and executed. Under no circumstances, therefore, should the Local Board consent to execute a main sewer without, *at the same time*, compelling the introduction of a water supply, and the formation of a branch drain, communicating with every house, court, and water-closet. This is absolutely essential to the success of the measure, and I dwell upon it here, because I find elsewhere, very generally, that the house owners have attempted to postpone the laying down house-drains until the main sewerage is completed, with the view, it is not uncharitable to suppose, of thus getting rid of the house drainage altogether.

426. Among the principal modern improvements in house-drainage, is the alteration in the arrangement of the drains, constituting, what is called, "back drainage." At present, the house-drains in Bristol, where there are any, usually commence in the court or offices behind the house, and are laid under the floor of the kitchen or cellar to join the sewer in the street in front. This plan seems to have been devised for the benefit of the bricklayer. The drain is usually composed of four bricks, or sometimes three only, laid dry, the bottom being the earth itself. The length is, of course, considerable, and the fall, consequently, diminished; and when these drains get out of order, the stench rises into the house. They also harbour beetles, rats, and other vermin.

427. Under the new system there will be laid, wherever practicable, a tube-drain at the backs of the houses, into which other smaller tube-drains are led from the houses and water-closets. The leading drain, after passing behind a certain number of houses, will communicate at intervals through an alley or some open space, with the street sewer.

428. The advantages of this plan are manifold. The house-drain is much shorter, and, therefore, has a better fall. It does not pass under the houses, and it is, therefore, more easily repaired, and less of a nuisance when it needs repair. Also, as this back drainage will always be combined with a constant water supply, the drains employed are smaller, and may be of stone-ware.

429. The gain, in the first cost, is considerable, but the chief advantage is in the improved fall. It is the perfection of a house-drain that it should convey away its contents at once, without any check or stoppage. The pecuniary advantages of back drainage are shown in the next section of this Report.

430. It appears from the evidence printed by the Metropolitan Sanitary Commission, that, with an inclination of 1 in 60, the ordinary house-drains, with a proper water supply, need not be

above 4 inches diameter, and that a 12-inch tube, with an inclination of 1 in 240, is quite sufficient for 50 houses.

431. The Public Health Committee for St. Philip and Jacob (out), after pointing out the wretched condition of the dwellings of the labouring classes, in that poor, populous, and neglected parish, add,—

“Nor does any other mode of relief present itself in reference to private dwellings themselves, except the substitution of houses with rooms of a suitable size, connected with proper drainage, ventilation, and supplies of water erected by a local association or other body, and let to the poor at a rent to compete with that which they now pay for their present inferior and comfortless accommodation.

“Under this impression, your Committee can hardly think it foreign to their duties most earnestly to recommend, as one of the greatest boons that philanthropy can devise or benevolence confer, erection of one or more model houses, similar to those which have been built in different parts of the metropolis for the occupation of the poor, on a small scale, and provided with everything that due attention to health and comfort demands. These benefits there is reason to believe may be conferred, while a fair return is, at the same time, secured for the capital expended, at a rental, little, if at all exceeding that charged by the owners of the present objectionable tenements.”

432. The importance of public baths and washhouses has already been appreciated by the Corporation of Bristol, who have recently applied the Act relating to these establishments to their City. A large building for this purpose has been erected in the open ground known as the “Rope Walk,” situated in the centre of a populous district, chiefly occupied by the labouring classes. The building is now completed; and the baths, with the necessary apparatus, will very soon be finished, and fit for use by the public. It is expected to cost about 7,000*l.*, and is designed by Mr. Baily, who has had much experience in the erection of similar structures, and will be fitted up with the latest improvements. Should this succeed, the Corporation contemplate building others in the City.

433. Model lodging-houses are, indeed, much needed, but a still greater boon would be the erection by some capitalist, of a large number of decent cottages, well drained and ventilated and supplied with water, and offered at a rent not more than sufficient to give a fair return upon the money expended. The erection of a few score of such cottages in Bristol would very soon show to the labouring classes the advantage of a comfortable home, and the demand for them would prove, to the present race of landlords, that if they wished to render their cottages productive, they must render them in the first place, commodious. The comfortable cottages, each with five rooms, recently built by the Duke of Bedford on the margin of the town of Tavistock, at a cost of 95*l.* each, and letting at 3*l.* 18*s.* per annum, are a proof of what may be done by a judicious employment of capital, and that

demand even for the large number built, is a proof of the readiness of the poor to take advantage of what is offered to them.

434. Besides the ordinary house accommodations of water-supply and drainage, it is important that the back premises of each cottage should be paved with a proper fall towards the drain, and that a covered ash-bin should be provided for dry rubbish.

435. CHARGES.—Before a trustworthy estimate can be formed of the expenses of a complete system of *sewerage* for the city of Bristol, it is absolutely necessary that a detailed survey and levels should be executed, and a very close examination made of all existing sewers. This, no doubt, will be a very laborious work, and will require the undivided attention of those who carry it out; but it is a necessary preliminary, and when it is done, the cost of the proposed system may be ascertained, with certainty, within very narrow limits.

436. I have attempted, for present purposes, to form an approximate estimate of the expense of a complete system of sewerage for the whole municipal area, taking into consideration the existing sewers, and I have had the aid of Mr. Armstrong and of Mr. Read, both practically conversant with the construction of sewers in Bristol and Clifton, and who have paid great attention to the proposals for a complete sewerage. Notwithstanding this assistance I still find myself, in the absence of any correct information as to the condition of the existing sewers, unable to form any correct estimate of the cost of completing the whole system. I find, however, that 150,000*l.* has been the sum named for the work, and although I regard this as considerably too high, I have accepted it, in order to show in what manner, and to what extent, even this large expenditure would, under the Public Health Act, affect the ratepayers.

437. This sum, if borrowed at 5 per cent., and its repayment distributed over 30 years, would be represented by an annual payment of 9,000*l.*, which is equivalent to a rate of 5½*d.* in the pound upon the rated rental, or 4½*d.* upon the gross rental. If the money were borrowed at 4 per cent., as, the security being excellent, would probably be the case, the annual payment would be reduced to 7,200*l.* Also, as, beyond question, the rental of the City of Bristol has increased materially during the last 10 or 12 years, the actual, as distinguished from the nominal rate, would be proportionably less.

438. Taking, however, the first estimate of 9,000*l.*, this, distributed over the 22,500 houses of Bristol, omitting land and other property, which will, however, bear a share in the taxation, amounts to 8*s.* per annum on each house on an average, or, upon tenements of 5*l.* rated rental, of rather less than 2*s.* 2½*d.* per annum, or,

many of the rents on such property being collected weekly, or about one halfpenny a-week.

439. The *water supply* for cottages of this class, at the present rates charged by the Water Company, would be 4s. per annum or rather below 1d. a-week; but no provision is made in the printed scale of rates for cottage water-closets.

440. The charges of *house accommodation*, although they are not like those of sewerage, defrayed by a public rate, of course fall eventually upon the class of persons who occupy the houses. The Local Board will have the power of directing, or if the owner neglects to obey, of executing, these improvements, and the outlay, which will, of course, be apportioned to the condition of the premises, may, if the Board execute the works, be distributed over 30 years.

441. In most cases, in Bristol, there is already a privy-house which admits of conversion into a water-closet, and most of the yards are paved. In a large number of cases, especially in the Old City, the position of the houses renders it impracticable to provide more than one water-closet to two houses.

442. Taking all these matters into consideration, the average expense of providing house accommodation, that is to say, water supply, water-closet, and house and yard drainage, for houses of 5l. and 10l. rated rental, would be as follows:—

	Per Annum.	Per Week.	Total.	
			Per Annum.	Per Week.
	s. d.	d.	s. d.	d.
House of £5 Rated Rental.				
Water Supply:—				
Public Rate	4 0	$\frac{12}{13}$		
Private Improvement Rate, representing an outlay of 15s. upon pipes and taps, distributed in equal instalments, principal and interest, over 30 years	0 9 $\frac{3}{4}$	$\frac{3}{16}$		
Total Water Supply . . . . .	..	..	4 9 $\frac{3}{4}$	1 $\frac{1}{16}$
Drainage:—				
Public Sewer Rate (5 $\frac{3}{4}$ d. in the £.)	2 4 $\frac{3}{4}$	$\frac{1}{2}$		
Private Improvement Rate:—				
£. s. d.				
Water-closet and drain	1 16 0			
Yard drain and sink	0 12 3			
House-drain and sink	0 16 9			
	3 5 0	3 6 $\frac{1}{2}$		$\frac{5}{8}$
Total Drainage . . . . .	..	..	5 11	1 $\frac{1}{8}$
Total Water Supply and Drainage . . . . .	..	..	10 8 $\frac{3}{4}$	2 $\frac{1}{8}$

	Per Annum.	Per Week.	Total.	
			Per Annum.	Per Week.
	s. d.	s. d.	s. d.	d.
House of £10 Rated Rental.				
Water Supply:—				
Public Rate	10 0	.. °		
Private Improvement Rate, 20s.	1 1	..		
Total Water Supply . . . . .	..	..	11 1	?
Drainage:—				
Public Rate (5½d. in the £.)	4 9½	..		
Private Improvement Rate:—				
	£. s. d.			
Water-closet and drain	1 18 0			
Yard sink and drain	0 12 6			
House sink and drain	0 17 0			
	3 7 6	3 7½		
Total Drainage . . . . .	..	..	8 5½	1¾
Total Water Supply and Drainage . . . . .	..	..	19 6½	4¼

443. This estimate is framed on the assumption that the house-owners are content to leave the works to be executed by the contractors of the Local Board, to the satisfaction of their inspector, instead of each executing them for himself, as in such a case they will probably cost more and be worse executed, and they will have to be paid for at once.

444. It appears, then, that the proposed remedies of water supply, drainage, and house accommodation, can be given to houses of 5l. rated rental, for a payment of 10s. 9d. per annum, or about 3d. per week, and for houses of 10l., for a payment of 19s. 6d. per annum, or 4½d. a-week, which is one-thirteenth of the average sum which there is reason to suppose to be expended from each house on intoxicating drinks, and considerably less than is now actually paid for a very imperfect supply of water alone.

445. The sum is stated in weekly payments, and referred to the houses of the labouring class, because that class will profit most by the remedies, and because the rent of that class is usually computed, and often paid, in weekly sums.

446. The distribution of the payment over 30 years removes at once the usual objection to house drainage, the unfairness of a present tax for permanent improvements upon a property in which the lessee, or even the owner, has only a limited interest. At present, if a sewer is proposed, everybody objects to pay for it; or, as the case has been well stated as regards water, and as it has in substance been often put to me, "I have only a reversionary interest," says the landlord, in reply to the appeal of these thirsty unfortun-

nates. "I have only 21 years' interest," says the lessee. "I have only 14 years' interest" (or 7 or 5, as the case may be) says the first holder's sub-lessee. "And I," says the actual occupant, "am only here for a twelvemonth." And so, pushing the analysis from grade to grade, we come, at last, to the mendicant tramp, the hirer of a night's lodging for 3d., as the actual enjoyer of the improvements—the man whose basin is to be emptied through one set of pipes, whose jug is to be filled at the other.

447. Now, the Public Health Act disposes of these objections. The cost of the improvements, with interest at, say 5 per cent., divided into 30 annual parts, or, in the case of the labouring classes, very often into 1,560 weekly parts, and each one of these paid by the family who receive the benefit, and only while they are receiving it. The *distributive rate* is the strong point of the Public Health Act, and that which deprives the compulsory powers of severity or harshness.

448. It is not difficult to show that Bristol will economize upon its annual expenditure by a judicious outlay in sewers. I have selected a few cases by way of illustrations of the contrast between the present, and the proposed system. I commence with that of Mr. Townsend.

449. Mr. Townsend, at my request, furnished me with a detailed plan of his property on Kingsdown, showing the course and cost of his new sewer, the houses now built and using it, the number he proposes to build, and the natural area which would drain through his sewer.

450. From this it appears that the cost of the sewer to the existing houses is nearly 10*l.* 10*s.* each, or 11*s.* 4½*d.* per annum, if distributed over 30 years; that the cost to each house, when the whole of Mr. Townsend's ground is built upon, will be about 2*l.* 5*s.* 2*s.* 5½*d.* per annum; and that supposing the whole of the natural drainage area to be occupied by houses, as it no doubt soon will be, and, under the provisions of the Public Health Act, to drain into Mr. Townsend's sewer, the cost, per house, would be 1*l.* 0*s.* or about 1*s.* 1½*d.* per annum for the use of a main trunk sewer. This is, of course, exclusive of the cost of branch sewers and junctions from the houses.

451. This instance, however, is by no means one particularly favourable to the advantages of a general system, because none of the houses are detached villas, and Mr. Townsend's sewer does not lead all the way to the river, but falls into a public sewer.

452. Mr. S. A. Barnett, in order to drain four houses in Chefield-place, Clifton, was obliged, in the absence of a public sewer, to construct a sewer from these houses as far as Berkeley-place, where there is a public sewer. This cost him 400*l.*, or 100*l.* per house, or say 5*l.* per annum. "But this sewer," says Mr. Barnett, "is oval, well constructed, 3 feet high and 2 feet wide, and 1

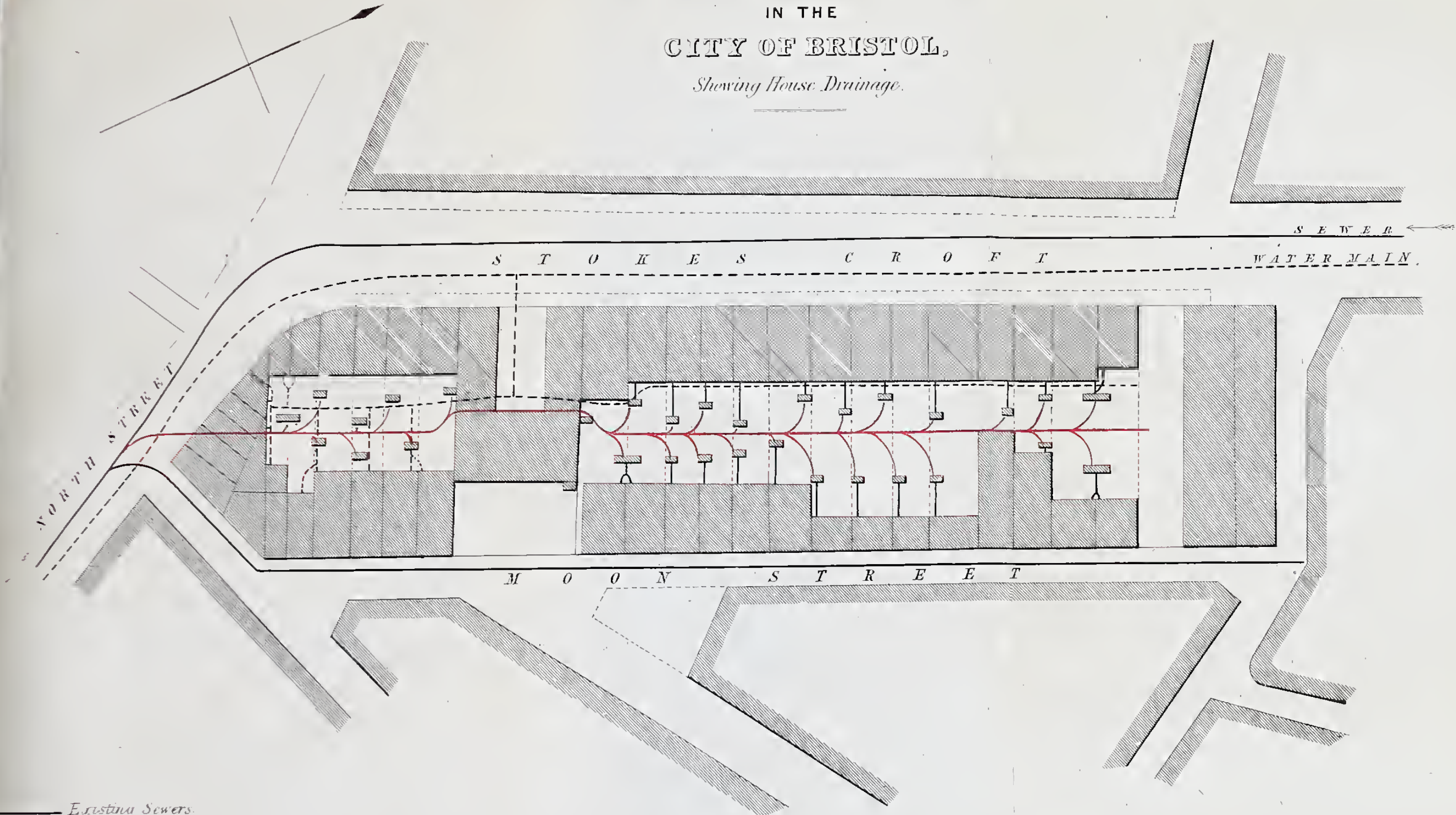
BRISTOL

ENLARGED PLAN OF HOUSES

IN THE

CITY OF BRISTOL,

Shewing House Drainage.



— Existing Sewers.
 — Proposed D^o.
 - - - Water Pipes

SCALE



deep below the road, and built under the superintendence of an architect and surveyor. It is capable of draining 500 or more houses, and at present, besides the four for which it was constructed, 50 others have clandestinely broken into and joined it."

453. Supposing this sewer to have been made by the local Board, and that, in carrying out their general plan, it became the main trunk for 500 houses instead of 4, the charge upon each house would have been 16s. instead of 100*l.*, or 10*d.* per annum instead of 5*l.* And cases very similar to that of Mr. Barnett are going forward almost daily, owing to the rapid extension of Clifton.

454. Even where there is a public body invested with powers of constructing main sewers, the expense is unequally distributed, and therefore excessive, unless they have powers both of rating all for the main sewer, and of compelling all to lay down house drains. Take, for example, Thomas-street. Here, the new sewer cost 500*l.* There are 122 houses in the street, of which only 23 chose to take advantage of the sewer, and join at the time of its construction.

455. I called upon Mr. Reid for his opinion as to the bad economy of the present system. He says,—

"I have taken great pains to obtain the information asked for, namely, the 'excess of cost of sewers for Clifton done by private speculation, over what it would have been if done by a recognized local power.' I find so much difficulty in arriving at it, in my wish to render you an unquestionable statement, that I am fearful of stating the difference. It is immense, to say nothing of the bungling manner in which the work is done, and the little use made of the sewers provided."

456. The City Commissioners have power to rate their whole area for the purpose of sewerage, which the parochial authorities, in Bedminster, for example, and practically in the District, have not. Had this case occurred in Bedminster, or St. Philip, the expense must have been borne by the 23 houses, and would have been 2*l.* 14s. 3*d.* each, whereas, had the whole 122 been compelled to join, it would have been only 4*l.* 1s. 11*d.* Besides which, the cost of re-opening the ground increases the expense of any house junctions subsequent to the completion of the main sewer, by about 20 per cent.; so that the house drains, which, in Thomas-street made by the Commissioners with the sewer, would cost about 5*l.* a house, will now cost 6*l.*

457. The plan annexed is intended to contrast the present and proposed system, more particularly as regards back drainage. It presents a block of 47 houses between Stoke's Croft and Moon-street. These, at present, have imperfect house drainage, and no water supply; but each has a privy. There are public sewers in the two streets, intended to receive the drainage of the houses on each side. The Moon-street sewer is 18 inches diameter, and cost, laid at a proper depth, 8s. 6*d.* per yard run, or 85*l.* The Stoke's Croft sewer is larger; but had it been constructed for the houses adjoining it only, it would have been, says Mr. Armstrong, 2 feet dia-

meter, which, at 10s. a yard, would have cost 132*l.* As each of these sewers faces two lines of houses, their cost, as regards the block under consideration, must be halved. The main sewerage, therefore, of these 47 houses, cost 108*l.* 10s., or about 2*l.* 6s. each.

458. By slow degrees these houses will all join the street sewer. Suppose, however, they had done so at once, while it was making the cost, says Mr. Armstrong, would have been 4*l.* 8s. each, or 206*l.* 16s. The total expense, therefore, of sewerage and house-draining this block, under the most advantageous view of the present system, would be 315*l.* 6s., or about 6*l.* 14s. each; and as this sum would have to be paid at once, it would, and does, form a serious drawback to the extension of house-drainage.

459. Suppose the same block drained by back drainage. Here for so short a distance, the surface-gutters would convey the rain-water into the main sewer in North-street, and the street-sewer, as far as these houses are concerned, would be dispensed with.

460. In their stead, a pipe-drain would be laid between the two lines of houses, and would receive branches from each house and water-closet. The expense of this, including kitchen sink and yard-drain, would be about 1*l.* 8s. per house, or about 65*l.* for the whole, or, instead of 6*l.* 14s. per house, paid at once, or 315*l.* 6s. upon the whole block, about 1s. 6½*d.* per annum on each, 3*l.* 10s. 5*d.* on the block, for 30 years.

461. This relates only to house-drainage: but supposing the houses to be supplied also with water service-pipes and water-closets the total cost would be about 4*l.* per house; so that, under the proposed system, each of these houses would receive full house accommodation for about 2*l.* 14s. less than they would now pay house-drainage alone, and the cost, instead of being paid at once would be distributed over 30 years, and amount only to 4s. per annum.

462. Surely, the expense of sanitary reforms cannot be pleaded against their introduction into Bristol. If the outlay required were to bear any close proportion to the benefits conferred, it would be large indeed; yet, even then, though there might be some reason to talk of its magnitude, there would be scarcely sufficient grounds to shrink from incurring it.

463. It will be evident, from what has been stated on the subject of BURIAL GROUNDS, that some provision on this head must be once carried into effect.

464. It is the very natural wish of the clergy that the parochial system should be respected in the proposed arrangements; with a view of carrying this into effect, the Rev. George N. Barr, Rural Dean of the Deanery of Bristol, laid before me, officially, the Report of a Committee of the Clergy of that Deanery upon "a best means of providing additional Burial-grounds for the populous parishes of the City of Bristol."

465. The Report is signed by 22 out of 23 incumbents, and is countersigned by the Bishop. It proposes to establish four suburban cemeteries, containing altogether 48 acres, calculated to receive the dead of a population of 140,000, having an average annual mortality of 3·1 per cent., or 4,340. The data for this computation are those furnished by Mr. Chadwick in his Report.

466. The Report of the Committee, which, considering the importance of the subject, I have annexed in full to my Appendix, gives the details of the proposed scheme. The Appendix to the Report, containing extracts from 12 and 13 Vict., cap. 3, and a correspondence between your Board and the London clergy, I have not thought it necessary to preserve here.

467. Since the establishment of the Arno's Vale Cemetery, the corporation of the poor have negotiated for a city burial-ground at Stapleton, but have not decided upon the purchase. They are also, I understand, in treaty for a plot of land at Horfield for a similar purpose.

468. It is, however, far more desirable that all parties should be compelled to unite in one or more general cemeteries, than that the poor should be buried in a different ground from the rich, or that each sect should have its own detached cemetery. The three railways, which radiate from Bristol, offer great facilities for the choice of ground sufficiently extensive to allow of each sect or class preserving its distinctions or peculiarities of interment, with as little interference as at present with the parochial system, and within the circuit of a common enclosure.

469. As it seems probable that this question of burial-grounds will be made the subject, during the present session of Parliament, of special legislation, I have not thought it adviseable to do more than point out, strongly, the fact that Bristol stands in present need of a place for the interment of the dead; nor, indeed, did I conceive that it lay within my province to entertain the general question of how this want was to be provided, the Public Health Act itself being deficient in this respect.

470. In such of the city burial-grounds as have become raised above the surface of the adjacent ground, the retaining walls appear never to have been well constructed, and to be invariably in bad repair. These are, in fact, sometimes wanting, and their place is supplied by the walls of private dwellings. In all such cases it is not enough to close the ground against future interments. The corpses already deposited will continue, for many years to come, to be a cause of sickness and discomfort to the living. Such grounds should be lowered, with all decency, the walls removed or rebuilt, a deep drain carried round the whole space, and the surface either flagged or laid down in turf and planted, according to circumstances. St. James's churchyard especially stands in need of such treatment.

471. The condition of certain of the SUBURBAN DISTRICTS,

abutting on the city, has been already incidentally noticed in this Report. St. George's Easton, parts of Bedminster, and parts of Horfield, may be particularly referred to. These are in, to the full, as objectionable a condition as those within the boundary, and should the Public Health Act be applied, and be efficiently carried out, within the municipal area, the marginal districts will still suffer from the nuisances existing on the premises of their neighbours. The Public Health Act should, therefore, be applied also to the parishes adjacent to the city boundary, and should these, upon the application of the Act, neglect to petition, each on its own account, I recommend that an inquiry be instituted into them upon their mortality.

472. **SEWAGE MANURE.**—With one or two considerable exceptions, the neighbourhood of Bristol is far more celebrated for the excellence of its soil than for the skill with which it is cultivated; a state of things which may account for the singular indifference which prevails as to the value of street scrapings, ashes, or house sewage as manure. In, and around the city, are numerous and very large depôts of ashes, sweepings from the limestone roads, bones, rags, and similar refuse, all of undeniable value as manure for the meadow lands of Somerset and Gloucester, but which no one has had either the energy or the capital necessary to make arrangements for the removal of by canal or railway. The dust contractors complain that the farmers will not purchase their stuff for more than 6*d.* or 1*s.* a ton, and often will not even cart it away when offered for the trouble; a fact corroborated by the large and inconvenient stocks at this time on hand.

473. Concerning the value of this refuse for dairy land, there are not, I understand, two opinions; and yet, it remains unremoved a fact which should be borne in mind, since it shows that the neglect of sewage manure and soil, which are not even collected, is no conclusive evidence against their intrinsic value.

474. Although many of the houses in Bristol are altogether without sewers, and others drain into the Frome or Avon, there is nevertheless, in the suburbs, a considerable storage of night-soil in the deep, sluggish, and open ditches which intersect the low lands Eastward of the city, where these ditches traverse market gardens; their contents are in great request, and are pumped and bucketted up, and extensively used as manure. In these districts, however, from the utter neglect of proper arrangements, the sewage is laid upon the ground in a most offensive state, and produces a wide spread nuisance. The ground is low, spongy, and undrained, and presents, in all respects, a contrast to the circumstances under which the use of liquid manure has been recommended.

475. The subject has recently attracted some attention, and I have received letters and plans concerning it from several very respectable sources. It is clear, as the foundation of the whole matter, the

the outfalls must be so arranged as to admit of the sewage being intercepted in any quantity required, the surplus having a free overflow into the Avon. Also, in whatever state the sewage may be finally employed, it must, in the first instance, be pumped up and transmitted to a certain distance from the town, by machinery.

476. In the plan of sewerage recommended in this Report, the method by which the outfalls would communicate with the machinery has already been indicated. Taking the system up at this point, it would be necessary to connect the outfalls with an iron main, discharging into a covered tank near St. Philip's marsh, over which a pumping-engine would be placed. By means of this engine, and a lifting main laid, like the Water Company's main, across the river, the sewage could be forced up to the tank upon Totterdown, or even at a greater distance, at a level not less than 200 feet above the bed of the river. The sewage once collected in such a tank, it would be easy, if required solid, to evaporate it, or, if fluid, to distribute it by pipes over the very considerable extent of country, which the elevation would command.

477. The Bedminster sewage might, if necessary, be combined in the same arrangement; but to employ that of Clifton it would be necessary to have another engine lower down the river. In this direction, however, it would be difficult to find land at all calculated for the use of the manure, much, being bare, rocky down, and more, laid out in pleasure-grounds, public drives, or paddocks attached to suburban villas.

478. Mr. Blackwell, engineer to the Kennet and Avon Canal Company, has forwarded to me some engineering particulars of a plan in some respects resembling that mentioned above. I am unable to separate the details of the sewerage arrangements which accompany the plan from those for the distribution of the manure; but Mr. Blackwell, whose opinion on such a matter is entitled to great respect, calculates the gross annual receipts from the employment of only half the sewage of Bristol, at 20,000*l.*; and the net receipts, after deducting the expense of new sewers, at rather above half this sum.

479. It seems to me difficult to suppose that the apathy of the public can much longer resist the mass of evidence which has been collected during the last few years as to the value of sewage manure; and the cheapness of fuel, and the great extent of dairy land in this neighbourhood, are circumstances very favourable to its profitable application in a liquid form. It does not, however, seem prudent, in a Preliminary Report, to make any estimates of profit from this source. The subject being quite new to Bristol, is viewed with a good deal of the distrust that legitimately attends want of accurate knowledge; and it is most important that the question of a complete main and house drainage for the city, and of the other measures recommended in this Report, should rest upon their

direct economy and importance; and that the urgent necessity which exists for their adoption should not be supposed to depend upon the profits derivable from the use of the sewage as manure. At the same time, it is demonstrable, that if the ashes and house refuse, instead of being carted into inaccessible places, were discharged at once into barges or railway waggons, they would command an extensive sale, and pave the way to the employment of the sewage, which there is strong reason to believe would exceed them in value many fold.

480. SUMMARY.—It appears from the foregoing Report—

1. That the mortality of the city of Bristol, exclusive of Bedminster, probably its least healthy part, but of which there are no distinct returns, is 26 deaths annually for each thousand of the population, as recorded in 1841; but that this average of the whole is greatly exceeded in certain districts, such, for example, as in a part of St. James's, in which the mortality is as high as 35 in 1,000.

2. That this mortality, and the sickness which it represents, are the cause of great pecuniary loss to the city, from the increase which is thus brought upon the poor's-rate, both from the loss of productive labour, the cost of medicines and relief, and the support of widows and orphans.

3. That this excessive mortality, sickness, and consequent expense, are to be attributed, in a very great measure, to the bad condition of the houses of the labouring classes, which form 54 per cent. of the whole city, and which suffer from want of drainage, water, and house accommodation; to the filthy state of most of the suburban streets and lanes; and to the want, save in the old city and a part of Clifton, of scavenging arrangements.

4. That the natural circumstances of Bristol are peculiarly favourable to health, most, even of the old City, being on high ground, and the suburbs of Clifton and Redland remarkably salubrious.

5. That the powers of the local governments, whether parochial or under Local Acts, are quite insufficient for the sanitary wants of the city; and even were they more extensive, would still remain insufficient, unless administered by one body over the whole municipal area.

6. That the city suffers materially from want of water; but that the formation of a Water Company, and the approaching completion of their works, will remove this difficulty, though, as yet, little disposition has been shown to take advantage of the partial supply already offered.

7. That parts of the old City, the whole of Clifton, and parts of the district of St. Philip and Jacob, are very imperfectly lighted, and the greater part of the two latter tracts, and the whole of Bedminster, are without any public lights at all; also, that

price of gas, as compared with other places, is high, and considered with reference to the great advantages of Bristol, exorbitantly so.

8. That a constant supply of water, a complete main and house drainage, and a water-closet, substituted for a privy, can be given for an annual payment of 10*s.* 9*d.* per annum on each house of 5*l.*, and 19*s.* 7*d.* on each house of 10*l.* rated rental, which two payments correspond to 2½*d.* and 4¼*d.* a-week.

9. That the saving, by the introduction of the proposed system of main sewerage and house drainage, over that now in use, will amount to about 5*l.* 6*s.* on every house remaining to be drained; that is to say, upon every house excepting those in the old City, and a few (comparatively) in Clifton, the District, and St. Philip and Jacob.

10. That the present church and chapel yards, and burial grounds, are utterly insufficient for the wants of the city, being almost all very full, and surrounded by houses, and quite unfit to be used as places of burial; but that, outside the city, an excellent public cemetery has been formed under a private Act.

11. That a large portion of the expenses of sewerage will be in earthwork, and within the power of the ordinary labouring population of the city to execute.

481. RECOMMENDATIONS.—I recommend, for the reasons stated in this Report—

1. That the Public Health Act, excepting sections 50, the latter paragraph of 70, and 96, be applied to the City of Bristol.

2. That certain sections of the Local Acts, that is to say, of the Local Act 46 Geo. III., c. 26, (1806), sections 2 to 26, 31, 37 to 42, 44 to 49, 53 to 56, 58 to 70, all inclusive, be repealed, and that the powers given in this and recognized in later Acts, be transferred to the Local Board. Also, of 5 Geo. IV., c. xxix. sections 22 to 30, both inclusive, 36, and 38, be repealed, and the powers transferred to the Local Board. Also, of 2 Will. IV., session 1831-2: An Act for repairs, etc. the United Parishes of St. James and St. Paul, page 17, sect. 3; p. 18, sects. 2 and 3; p. 22, sect. 2; p. 24, sect. 2; p. 25, to section 2 in page 31; page 35; page 36, sect. 1, all inclusive to be repealed, and all matters within the scope of the Public Health Act to be administered by the Local Board.

3. That powers to establish gas-works, or to contract with parties for lighting the city, be vested in the future Local Board.

4. That powers to carry main sewers across private property, with the usual arrangements with regard to the assessment of damages, be vested in the future Local Board.

5. That inquiries, with a view to the application of the Public Health Act, be directed to be made into the sanitary condition of

such of the parishes contiguous to the city of Bristol, the mortality of which shall be above 23 in the 1,000.

[One effect of carrying out these recommendations will be to abolish, or very materially to restrict the duties of several Boards each employing a staff of paid officers, some of whom, should their services not be required by the new Local Board, will have an equitable claim for compensation. I feel it peculiarly incumbent upon me, in calling attention to this point, to state, that the inquiry was actively supported by the whole of these officers.]

I have the honour to remain,

My Lords and Gentlemen,

Your obedient Servant,

GEO. T. CLARK.

The General Board of Health,

&c., &c., &c.

APPENDIX A.

STATISTICS OF PUBLIC SCHOOLS, BRISTOL.

This Return is for Day-Scholars only. No Return is made for Sunday or Evening Schools.

School or Name of School.	Situation of School.	School-Fees per Week.	Boys.		Girls.		Infants.		Total.	
			On Books.	Daily Attendance.	On Books.	Daily Attendance.	On Books.	Daily Attendance.	On Books.	Daily Attendance.
	St. James and St. Paul, St. James's, Barton.	..	200	150	87	65	..	..	287	215
Infants'	St. James, Barton-street . . . . .	..	..	..	..	..	130	116	130	116
	Nelson-street . . . . .	..	108	80	55	45	..	..	163	125
	Christchurch, and St. Ewens, Pithay.	..	44	30	48	38	..	..	92	68
	St. Stephens, 32, Princes-street	Free	40*	30*	35*	25*	65*	35*	140*	90
	St. Augustine's, Wells-street . . . . .	..	58	50	54	50	150	45	262	145
er's	St. Nicholas, King-street . . . . .	..	..	..	..	..	105	90	105	90
	Castle-green, Lower School	Various	60	50	..	..	..	..	60	50
	Upper School . . . . .	..	67	60	..	..	..	..	67	60
er's	Friars . . . . .	..	..	..	44	31	..	..	44	31
	Salem Chapel, St. Augustine's-place.	..	78	68	49	45	..	..	127	113
arochial	St. Paul's, Meadow-street . . . . .	..	..	..	..	..	200	90	200	90
General	New-street, St. Philip (Out) . . . . .	..	..	..	..	..	115	90	115	90
	East-street, Bedminster . . . . .	..	298	253	188	135	..	..	486	388
arochial	Tower-street, Temple	2d. & 1d.	..	..	..	..	100	76	100	76
	Temple-street	Free	..	..	34	32	..	..	34	32
	Temple	1d.	..	..	92	75	..	..	92	75
er's	Somerset-street, Cathay	4d.	50	40	..	..	..	..	50	40
	Redcliff, Thomas-street	2d. & 3d.	38*	35*	30*	28*	..	..	68	63
	Redcliffe-hill	2d. & 3d.	60*	58*	40*	32*	..	..	100	90
	Church-lane, Temple	Free	42	40	50	40	..	..	92	80
General	Counterslip	2d. & 3d.	202	140	..	..	..	..	202	140
	Back-lane, Bedminster . . . . .	..	180	130	110	70	..	..	290	200
Congrega-	Zion Independent Chapel . . . . .	..	..	..	..	..	120	90	120	90
ool	Redcliffe-hill . . . . .	..	..	..	24	20*	..	..	24	20
	Pile-street	Free	40	35*	..	..	..	..	40	35
Parochial	Temple-street . . . . .	..	..	..	40	35*	..	..	40	35
General	Stokes Croft	Free	40	38*	..	..	..	..	40	38
	Cutler's-hall, Merchant-street	1d., 2d., & 2½d.	290	233	..	..	..	..	290	233
	Redcross-street, St. Philip's	2d. & 3d.	350	302	124	92	..	..	474	394
	St. Matthew's . . . . .	..	..	..	36	26	..	..	36	26
	Adjoining Church, Montpelier	2d.	73	58	61	40	..	..	134	98
Parochial	Lawford's-gate, Trinity District . . . . .	..	326	227	182	130	..	..	508	357
	St. George's, Brandon-hill	1d.	..	..	..	..	230	172	230	172
	Clifton Wood	1d.	260	208	212	155	..	..	472	363
	Merchants' Parade Avenue	1½d.	..	..	..	..	170	140	170	140
	Miss Cholmeley's, Lower BelleVue	2d.	..	..	108	83	..	..	108	83
	St. John's, Durdham Down	1d.	67	55	96	65	40	25	203	145
	Berkeley-place	1d.	..	..	..	..	98	72	98	72
	St. Simon's, Baptist Mills . . . . .	..	48	39	20	17	..	..	68	56
chool	Baptist Chapel, Thrisseil-street	1½d.	..	..	..	..	140	110	140	110
	Chapel-street, Dings, St. Philip's	2d., 3d., & 4d.	112	90	78	69	..	..	190	159
	Sussex street, St. Philip's	1d. & 1½d.	..	..	..	..	150	100	150	100
	Lewin's Mead, adjoining Unitarian Chapel.	3d.	120	108	104	84	..	..	224	192
	St. James's, Back	2d.	..	..	..	..	170	145	170	145
	Narrow Lewin's Mead	Free	120	90	160	120	..	..	280	210
	St. Michael's-hill . . . . .	..	30	20	30	20	..	..	60	40
Parochial	St. Michael's-hill . . . . .	..	88	65	56	46	..	..	144	111
Catholic	Trenchard-street . . . . .	..	140	110	..	..	80	60	80	60
ational	Adjoining Hope Chapel, Clifton	Various	130*	90*	140*	110*	..	..	140	110
or Na-	St. Philip's, Broad Plain . . . . .	..	150	95	160	80	..	..	270*	200*
School	Bread-street, St. Philip's . . . . .	..	163	118	140	104	43	36	346	258
Catholic	Dighton-street (Girls') . . . . .	..	..	..	110	80	..	..	110	80
	Cotton-works . . . . .	..	56	37	63	46	..	..	119	83
Catholic	Clifton	1d.	..	..	140	110	..	..	140	110
	Clifton	2d.	51	43	..	..	..	..	51	43
Total			1,179	3,275	3,080	2,296	2,220	1,572	3,473	7,143

The following schools (endowed) are not included. Some of the schools included in the Table are partially endowed:—

Free Grammar School, Unity-street	200	Boys.
College Grammar School	about 50	,,
Queen Elizabeth's Hospital	140	,,
Colston's Hospital	100	,,
Redmaids' School	120	Girls.

EVENING SCHOOLS.

	Boys.		Girls.		Total.	
	On Books.	Daily Attendance.	On Books.	Daily Attendance.	On Books.	Daily Attendance.
Ragged School, St. James's Back, } Evening Schools }	160	66	60	35	220	101
Ragged School, Durdham Down	80	65	..	..	80	65
Ragged School, Limekiln-lane . . . . .	..	..	..	..	..	..
Benevolent Evening School . . . . .	..	..	..	..	..	..
Friends' Evening School . . . . .	..	..	..	..	..	..
Mr. Mühler's, Castle-green . . . . .	..	..	..	..	..	..

I am not sure that I have always used the terms parochial national with accuracy. They appear to be used very arbitrarily, almost indiscriminately. The two classes might, perhaps, be properly grouped together as Church of England schools.

New school-rooms (for boys and girls, I believe) are in course of erection for this parish, as also for St. Augustine.

The schools, so named, are under the entire management of the H. Mr. Mühler, a minister connected with the Plymouth Brethren, the means of support being raised by him from general benevolence. An orphan asylum, situated about a mile and a half from Bristol, for the entire support and education of about 240 children, is established on the same basis.

APPENDIX B.

A SHORT EPITOME of the various Alterations effected under the BRISTOL IMPROVEMENT ACTS, 1840, and 1847, in the STREETS, LANES, &c. in other places, in the CITY and COUNTY of BRISTOL.

New Street Completed.—Phippen-street.

New Street Projected and in Course of Completion.—Violet-street. Eighteen houses and one plot of ground have been purchased.

Streets Widened.—Redcliffe-hill; Redcliffe-pit; Pump-lane; Marlborough-lane; Baldwin-street; Bridewell-street; Silver-street; Marlborough-lane, Marlborough-hill; Hotwell-road (works now in operation); Limekiln-lane (works now in operation); Bristol-bridge (works now in operation); Barrs-lane (works now in operation); Barton-alley.

STREETS, where the Fronts of HOUSES and other PREMISES have been Set Back, and Land devoted to Widening the Public Thoroughfare.

Name of Street.	Number of Premises Altered and Set back.	Name of Street.	Number of Premises Altered and Set back.
Temple Backs, <i>alias</i> Bride-lane	2	West-street	1
Hotwell-road	1	East-street, Bedminster	1
Broad-street	10	Stokes-croft	1
Penn-street	1	Griffin-lane	1
Peter-street	1	Castle Mill-street	4
Berkeley-place	2	Cannon-street	1
Unity-street	1	Castle-ditch	1
Maryport-street	3	Corn-street	6
Temple-street	1	Avon-street	1
Baldwin-street	1	Wine-street	1
Broadmead	4	Penny Well-lane	1
Castle-street	9	Montague-street	1
College-green	1	High-street	2
Jacob-street	1	North-street	5
Welsh-back	1	Park-place	1
Thomas-street	3	Ellbroad-street	1
Old Market-street	1	Cheese-lane, Bread-street	1
Clifton-place	2	Dolphin-street	1
Leek-lane	1	Bindon - place, Durdham }	3
Quay	6	Down	
		Narrow Plain	1

APPENDIX C.

BRISTOL WATER-WORKS.
TERMS of SUPPLY for DOMESTIC USE.

House Rent.	Water Rate per Quarter.	House Rent.	Water Rate per Quarter.	House Rent.	Water Rate per Quarter.			
£.	£. s. d.	£.	£. s. d.	£.	£. s. d.			
Not exceeding	5	0 1 3	Not exceeding	36	0 7 9	Not exceeding	88	0 14 0
	6	0 1 6		38	0 8 0		91	0 14 3
	7	0 1 9		39	0 8 3		94	0 14 6
	8	0 2 0		40	0 8 6		97	0 14 9
	9	0 2 3		41	0 8 9		100	0 15 0
	10	0 2 6		43	0 9 0		105	0 15 9
	11	0 2 9		45	0 9 3		110	0 16 6
	12	0 3 0		47	0 9 6		115	0 17 3
	13	0 3 3		49	0 9 9		120	0 18 0
	14	0 3 6		50	0 10 0		125	0 18 6
	15	0 3 9		52	0 10 3		130	0 19 0
	16	0 4 0		54	0 10 6		135	0 19 6
	17	0 4 3		56	0 10 9		140	1 0 0
	18	0 4 6		58	0 11 0		145	1 0 6
	20	0 5 0		60	0 11 3		150	1 1 0
	21	0 5 3		62	0 11 6		155	1 1 6
	22	0 5 6		64	0 11 9		160	1 2 0
	23	0 5 9		66	0 12 0		165	1 2 6
	24	0 6 0		68	0 12 3		170	1 3 0
	26	0 6 3		70	0 12 6		175	1 3 6
28	0 6 6	73	0 12 9	180	1 4 0			
30	0 6 9	76	0 13 0	190	1 4 6			
32	0 7 0	79	0 13 3	200	1 5 0			
34	0 7 3	82	0 13 6	Above 200 at 12s. 6d. per cent. per quarter.				
35	0 7 6	85	0 13 9					

Shops, Offices, Warehouses, &c.

		£. s. d.			
If Rental under	20 <i>l.</i>	. . . 0	1	3	per quarter.
20 <i>l.</i> and less than	30 <i>l.</i>	. . . 0	1	6	,,
30 <i>l.</i>	,, 50 <i>l.</i>	. . . 0	2	0	,,
50 <i>l.</i>	,, 75 <i>l.</i>	. . . 0	2	9	,,
75 <i>l.</i>	,, 100 <i>l.</i>	. . . 0	3	9	,,
100 <i>l.</i> and upwards	. . . . .	. . . 0	5	3	,,

This scale to be applicable to any shop or premises not requiring water for carrying on the trade or business therein; and in cases where the shop, office, or warehouse is part of, or connected with, or contiguous to, a dwelling-house in the occupation of the same person, the charge will be apportioned by a Committee of the Directors, viz., the shop, office, or warehouse, will be charged under this scale, and the part occupied as a dwelling-house upon the scale for domestic purposes; but such shop, office, or warehouse will be supplied if the water be not taken into the dwelling-house for domestic use.

Hotels, Inns, &c.

In addition to the rate for domestic use:—

		£. s. d.			
At less than	20 <i>l.</i> rent	. . . 0	1	3	per quarter.
20 <i>l.</i> and less than	40 <i>l.</i>	. . . 0	1	9	,,
40 <i>l.</i>	,, 60 <i>l.</i>	. . . 0	2	3	,,
60 <i>l.</i>	,, 80 <i>l.</i>	. . . 0	3	0	,,
80 <i>l.</i>	,, 100 <i>l.</i>	. . . 0	3	9	,,
100 <i>l.</i>	,, 125 <i>l.</i>	. . . 0	4	9	,,
125 <i>l.</i>	,, 150 <i>l.</i>	. . . 0	6	3	,,
150 <i>l.</i>	,, 175 <i>l.</i>	. . . 0	7	9	,,
175 <i>l.</i>	,, 200 <i>l.</i>	. . . 0	9	6	,,
200 <i>l.</i> and upwards	. . . . .	. . . 0	12	6	,,

For Brewing, Stables, &c. terms to be agreed on.

Baths (private) each at 2*s.* 6*d.* per quarter.

Water-closets.

		£. s. d.			
For one in houses of	30 <i>l.</i> rent and upwards	. . . 0	2	6	per quarter.
For every additional closet in the same house		0	1	3	,,
For one in houses of less than	30 <i>l.</i> rent	. . . 0	2	0	,,
For every additional closet in the same house		0	1	0	,,

If attached to offices or other buildings occupied by several persons, and not used as dwelling-houses, the terms to be agreed upon.

Supplies of water for any purpose not before mentioned must be made the subject of special contract.

The Company will undertake, on very moderate terms, the work of laying down and fixing the requisite pipes from the main to any part of the house or building to be supplied.

Any other information may be obtained on application to
C. W. BRAGGE, Secretary

The Bristol Water-works' Company will contract for the supply of water with the owners of small tenements, at the following reductions from the published scale of charges, viz. :—

Not exceeding 10 <i>l.</i> rental	. . .	20 per cent.
,, 15 <i>l.</i> ,,	. . .	15 ,,
,, 20 <i>l.</i> ,,	. . .	10 ,,

By order of the Directors,
C. W. BRAGGE, Secretary.

Water-works' Office, Small-street,
June 22. 1849.

APPENDIX D.

CITY SEWERS.

NUMBER of HOUSES, the Proprietors or Tenants of which have availed themselves of connecting their PRIVATE DRAINS with the NEW PUBLIC SEWERS made by the Commissioners for Sewering, Paving, &c. the City of BRISTOL, in the last 13 Years; also, the Number of Houses in each Street.

		Number of Houses in the Street.	Number of Houses that are Connected.
Rosemary-street and Water-street.	Several of the private drains are in the back part of the houses, and are connected with the sewer at one place.	45	9
Merchant-street . .	Several of the private drains are intersected in making the new sewer, and let into the same.	32	6
Felson-gardens . .	. . . . .	10	7
Denmark-street . .	Many of the drains were let in while the sewer was making.	16	5
Broad-street . . .	Most of the drains were intersected . . .	40	10
East end of Corn-street.	Some of the drains are behind, and discharge into small street sewer.	10	3
Newmarket-passage	The drains were intersected	14	5
Jacob-street . . .	The new sewer only in part of the street .	20	3
Vine-street . . .	Several of the drains were intersected, and some follow the old sewers, and are let in at one place; others go another way.	50	15
Dolphin-street . .	. . . . .	12	8
Adam and Eve-passage.	. . . . .	5	5
Maryport-street . .	Many of the drains are intersected, and others follow the old sewers, and are let in at one place.	46	18
High-street . . .	Several of the drains are connected with old sewers in a higher level, and are connected with the new sewer at several places.	40	16
Quay-street . . .	Some of these were connected as the work proceeded.	10	

Number of Houses, the Proprietors or Tenants of which have availed themselves connecting their Private Drains with the New Public Sewers, &c.—*continued*

		Number of Houses in the Street.	Number of Houses in the Street.
Small-street . . .	Most of the drains were intersected . . .	24	
Upper York-street .	. . . . .	4	
Bristol-back . . .	The old sewers mostly went across the street into the Floating Harbour.	41	
King-street . . .	Many of these are connected with the new sewer at several places.	38	
Back-street . . .	The new sewer is made only in a part of the street.	12	
Nelson-street . . .	The old sewers went across the street, and were intersected.	26	
Bridewell-street .	. . . . .	8	
Philadelphia-street.	. . . . .	14	
Allsaints'-street, Avenues, and Wellington-street.	Some follow the old sewer, and are let in at several places.	49	
St. Michael's-hill .	Several of the drains are behind the houses .	28	
Clarence-place . .	. . . . .	2	
Redcross-street . .	Several of the drains are let in with old sewers.	37	
Wellington-court .	Many of the drains are joined together, and enter the new sewers at several places.	22	
Wellington-place .	„ „	20	
Gloucester-place .	„ „	22	
Grosvenor-place . .	. . . . .	21	
York-place	The old sewers are behind the houses, and discharge into Redcross-street new sewer.	12	
Thomas-street . . .	Many drains are still discharged into the old sewers, and connect with the new sewer at several places.	122	
Phippen-street . . .	A new sewer was made by the Corporation, six years ago, when the street was laid out, but at too high a level; this will be put into the new sewer at different places.	22	
Three-Queen-lane .	. . . . .	4	
Charlotte-street .	. . . . .	4	
	Total	882	
	or 32·8 per cent.		

JOHN ARMSTRONG, Surveyor

February 22, 1850.

APPENDIX E.

CITY SEWERS.

SEVERAL SEWERS made in 1848 and 1849 by the COMMISSIONERS for SEWERING, PAVING, &c. the CITY of BRISTOL, which now convey the Sewage from several Streets and Houses into the Tidal River, that formerly was discharged into the Floating Harbour and the River Froome.

Name of Street, &c.	Number of Houses.	Name of Street, &c.	Number of Houses.
*Wine-street	50	Redcliffe Ward :—	
*Dolphin-street	12	†Thomas-street	96
*Peter-street	6	†Long-row	15
*Maryport-street	46	†Vernon's-court	8
*Cheese-market	4	†Courts west side of Thomas- street	35
*Adam and Eve-passage	5	†Thomas-lane . . . . .		6
*Bridge-street	49	†Little Thomas-lane	8
*High-street	40	†Queen's Head-court	7
*Nicholas-street	26	†Three-Queen-lane	10
*High-street-market	6	†Wheat-sheaf-lane	7
*Baldwin-street	36	†Hamilton-court	11
*Back-street	42	†Waterloo-court	10
*Coronation-place and Rackhay	34	†Part of Mitchell-lane	12
*Bristol-back	41	†Part of Bath-street	17
*Crow-lane	6	†Most of the east side of Red- cliff-street	67
*Part of King-street	25	†Portwall-lane (portion) . . . . .		16
*Quay-street	10	†Phippen-street	12
*Broad-street	50	†Canynge-street	8
*John-street	19	†Redcliffe-hill	18
*Tower-lane	58	†Part of Cathay and court	21
*Newmarket-passage	14	†Cathay-parade	5
*Cider House-passage	6	†The west end of Pile-street	24
*Nelson-street	26	†Four courts, &c.	38
*Bridewell-street	8		
*Allsaints'-street	18		
*Two Avenues	8		
*Wellington-street	16	Total	1,132

Those marked thus (*) are discharged into Mylne's Culvert, and thence conveyed to the Tidal River, below Bathurst Basin, Outer Lock.—Those marked thus (†) are discharged into the Tidal River 60 feet westward of Harford's Bridge.—Those marked thus (‡) are discharged into the Tidal River, near the Cattle Market at present, but will soon be turned into the sewer in Phippen-street.

JOHN ARMSTRONG, Surveyor.

February 19, 1850.

APPENDIX F.

BRISTOL COMMISSIONERS OF SEWERS, &c.

ABSTRACT OF RETURNS OF HOUSE-DRAINAGE in the undermentioned Streets and Place
CITY OF BRISTOL, before new Trunk Sewers were made in such Streets and Place.

Name of Street, Lane, ¹ or Court.	HOUSES.									Remarks.	
	Total Number.	With Drains communicating with a Sewer.	With Drains communicating with a Cess-pool.	Without Drains.	With Privy or Water-closet communicating with a Sewer.	With Privy or Water-closet communicating with a Cess-pool.	Without Privy or Water-closet.	With Water laid on.	With Dust-bins.		Flooded.
Thomas-street	122	113	.	9	118	.	4	39	.	13	.
Gillard's-cottages, Thomas-street.	5	5	.	.	.	.	.	.	.	.	1 privy houses.
Plough-court, Thomas-street	11	11	.	.	.	.	.	.	.	.	7 privies
Carlisle's-court, Thomas street	8	8	.	.	.	.	.	.	.	.	1 privy for
Russell's-court, Thomas-street	4	4	.	.	.	.	.	.	.	.	2 privies
Philpen-street	22	20	.	2	21	.	1	6	.	3	.
Redcliff-hill	83	83	.	.	83	.	.	34	.	2	.
Jenning's-court, Redcliff-hill	5	5	.	.	.	.	.	.	.	.	1 privy for
Tennis-court, Redcliff-hill .	19	19	.	.	.	.	.	.	.	.	1 privy for
George's-alley, Redcliff-hill	5	5	.	.	.	.	.	.	.	.	1 privy for
High-street	41	41	.	.	41	.	.	31	.	.	.
Maryport-street and church-yard.	33	32	.	1	32	.	1	20	.	.	.
Nelson-street	11	10	.	1	10	.	1	5	.	6	.
Bridewell-street	8	7	.	1	8	.	.	5	.	2	.
Quay-street	11	11	.	.	.	.	.	4	.	1	.
Greyhound-place, Quay-street.	4	4	.	.	.	.	.	.	.	.	1 privy houses.
Harford's-court, Quay-street	5	5	.	.	5	.	.	.	.	.	.
Small-street	21	21	.	.	19	.	2	15	.	.	.
Bell-lane	3	3	.	.	3	.	.	3	.	.	.
Stephen-street, Quay-head, and Leonard's-lane.	8	8	.	.	8	.	.	1	.	.	.
All Saints'-street	21	21	.	.	21	.	.	1	.	.	.
Webber's-Court, All Saints'-street.	4	.	.	.	.	.	.	.	.	.	1 privy houses, in the court
Aldersquay-lane	6	6	.	.	6	.	.	1	.	.	.
Narrow Quay	3	3	.	.	3	.	.	1	.	1	.
Thunderbolt-street	9	9	.	.	8	.	1	4	.	.	.
Prince-street	4	4	.	.	4	.	.	4	.	2	.
King-street	43	43	.	.	42	.	1	20	.	3	.
Little King-street	2	2	.	.	2	.	.	.	.	.	.
Charlotte-street, Queen-square.	3	3	.	.	3	.	.	2	.	.	.
Back-street	16	16	.	.	15	.	1	4	.	.	.
Rackhay, Coronation-place, Red-lane, and Crow-lane.	31	31	.	.	16	.	15	.	.	3	.
Welsh Back	26	26	.	.	26	.	.	11	.	10	.
Baldwin-street	11	11	.	.	9	.	2	2	.	2	.
Nicholas-street and steps	11	11	.	.	11	.	.	2	.	2	.
Redcross-street	26	26	.	.	10	.	16	10	.	3	.
York-place, Redcross-street	6	6	.	.	6	.	.	.	.	6	.
Wellington-court, Redcross street.	22	22	.	.	.	.	.	.	.	.	10 privies for
Gloster-place, Redcross-street	19	19	.	.	.	.	.	.	.	.	3 privies for
Grosvenor-court, Redcross-street.	20	20	.	.	.	.	.	.	.	.	Several privies for the court
St. Michael's-hill and terrace	38	31	7	.	31	7	.	17	.	2	.
Total	750	725	7	14	561	7	45	242	.	61	.

SAMUEL SHARP BIRTILL,
Inspector of Lamps

APPENDIX G.

POLICE RETURN 1.—ABSTRACT OF THE NUMBER AND CONDITION OF THE STREETS AND LANES IN THE CITY AND COUNTY OF BRISTOL.

PARISH.	Number of Streets and Lanes.				Scavenging.				Water.			Number of Warehouses, Manufactories, &c.	Number of Houses.	Privies.		Number of Houses suffering From Nuisances.	Slaughter-houses.		Obnoxious Trades.	Houses without Back Windows.
	Perfectly.	Imperfectly.	Twice a-week.		Public Conduits.	Public Pumps or Wells.	Private Pumps or Wells.		Houses supplied by Water Company.	Good.	Bad.			Total.	In good order.		In bad order.			
			Perfectly.	Imperfectly.			Perfectly.	Imperfectly.										Good.			Bad.
Allsaints'	3	..	2	..	1	..	20	..	7	14	22	22	..	22	..	7	..	..	3
Christchurch	10	..	5	..	..	2	83	..	28	13	116	108	..	108	..	25	..	..	36
St. Ewin's	2	..	2	..	..	..	8	..	3	4	7	10	..	10	..	1	..	..	..
St. James's	77	16	49	..	..	..	1,124	19	158	49	1,309	1,286	..	1,319	..	88	3	..	118
St. John's	13	..	13	..	1	..	98	2	10	48	106	117	..	117	..	4	2	..	12	
St. Leonard's	8	..	8	..	..	..	17	..	2	26	21	17	..	17	..	..	..	..	3
St. Mary-le-port	4	..	4	..	..	..	46	2	6	8	41	33	..	33	..	9	..	..	4
St. Michael's	37	..	37	..	..	..	471	..	52	..	514	570	5	575	..	56	..	2	50
St. Nicholas	7	15	15	..	..	..	216	..	34	98	190	236	1	237	..	13	..	..	17
St. Paul's	124	..	74	35	..	..	2,735	67	142	55	2,194	2,261	32	2,293	6	96	1	2	39
St. Peter's	14	..	14	..	1	..	137	10	36	21	172	149	15	164	1	21	..	1	28	
St. Stephen's	15	..	15	..	1	..	177	..	63	123	216	230	..	230	..	9	..	..	22
St. Werburgh's	2	..	2	..	..	..	12	..	3	44	10	10	..	10	..	..	..	..	..
	324	16	240	35	3	3	5,144	100	544	503	4,918	5,043	92	5,135	13	329	1	1	10	332

NOTE.—The excess of dwelling-houses in this abstract over the street returns is caused by the void houses in the different parishes, and were not entered in the former return, the parish-clerks not knowing where to apply for the necessary information.

APPENDIX H.

POLICE RETURN I A.—ABSTRACT of the NUMBER and CONDITION of the COURTS in the CITY and COUNTY of BRISTOL.

PARISH.	Thoroughfares.	Not Thoroughfares.	Total.	Surfaces.				Scavenging.				Drainage.				Water.			Total Number of Houses.	Total Number of Privies.	Instances of Over-crowding.								
				Paved and Flagged.	Paved and Pitched.	Paved.	Pitched.	Neither Paved nor Pitched.	Imperfect, three times a-week.	Imperfect, twice a-week.	Ashes only removed.	Totally neglected.	Covered.	Open.		Good.	Bad.	Water Company, No. of Courts supplied.				Public Conducts.							
														Free.	Choked.								Free.	Choked.					
Allsaints'	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0			
Christchurch	1	3	4	0	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
St. James's	4	58	62	0	38	3	21	0	10	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. John's	0	4	4	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. Leonard's	0	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. Mary-le-pott.	2	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. Michael's	2	13	15	0	15	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Nicholas.	0	4	4	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Paul's	9	50	59	0	3	42	14	1	16	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Peter's	1	5	6	0	0	4	2	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Stephen's	1	2	3	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	21	140	161	0	6	110	45	1	10	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Police Return B. Abstract of the Number and Condition of the Streets and Lanes in the City and County of Bristol.

POLICE RETURN 2.—ABSTRACT OF THE NUMBER AND CONDITION OF THE STREETS AND LANES IN THE CITY AND COUNTY OF BRISTOL.

PARISH.	Number of Streets and Lanes.		Scavenging.				Water.			Privies.		Number of Houses.		Number of Houses suffering from Nuisances.		Slaughter-houses.		Obnoxious Trades.	Houses without Back Windows.
	Perfectly.	Imper- fectly.	Thrice a-week.	Twice a-week.	Wholly neglected.	Public Conduits.	Public Pumps or Wells.	Houses supplied by Water Company.	Number of Warehouses, Manu- factories, &c.	Good.	Bad.	Good.	Bad.	Total.	Number of Houses suf- fering from Nuisances.	In good order.	In bad order.		
Castle Precincts	8	..	..	8	..	None	187	8	45	19	190	180	5	185	21	2	1	8	528
St. Philip and Jacob (in)	17	2	..	13	2	..	364	..	46	14	441	416	4	420	18	7	..	55	591
St. Philip and Jacob (out)	121	..	..	5	86	..	2,574	..	156	58	3,664	3,287	75	3,362	477	26	..	19	528
Total	146	2	..	26	88	..	3,125	8	247	911	4,295	3,883	84	3,967	516	35	1	19	591

APPENDIX J.

POLICE RETURN 2 A.—ABSTRACT OF THE NUMBER AND CONDITION OF THE COURTS IN THE CITY AND COUNTY OF BRISTOL.

PARISH.	Thoroughfares.		Surfaces.				Scavenging.				Drainage.		Water.		Number of Houses suf- fering from Nuisances.	Total Number of Houses.	Total Number of Privies.	Instances of Over- crowding.		
	Thoroughfares.	Not Thoroughfares.	Paved and Flagged.	Paved and Pitched.	Paved.	Pitched.	Neither Paved nor Pitched.	Imper- fect, three times a-week.	Imper- fect, twice a-week.	Ashes only removed.	Totally neglected.	Covered.	Open.	Good.					Bad.	Water Company, No. of Courts supplied.	Public Conduits.
Castle Precincts	..	14	..	3	6	4	1	4	10	..	4	3	20	1	1	None	7	43	None	
St. Philip & Jacob (in)	2	44	..	..	31	12	3	..	42	4	..	3	83	3	2	..	3	321	191
St. Philip & Jacob (out)	8	130	..	..	74	27	..	54	8	76	6	6	161	8	10	..	64	732	363
Total	10	188	..	3	111	53	31	58	60	80	12	1	264	12	13	..	74	1119	597	..

APPENDIX K.

POLICE RETURN 3.—ABSTRACT of the NUMBER and CONDITION of the STREETS and LANES in the CITY and COUNTY of BRISTOL.

PARISH.	Number of Streets and Lanes.				Seavenging.			Water.			Privies.			Slaughter-houses.		Onoxious Trades.	Houses without Back Windows.	REMARKS.		
	Perfectly.	Imperfectly.	Wholly neglected.		Public Conduits.	Public Pumps or Wells.	Private Pumps or Wells.		Houses supplied by Water Company.	Number of Warehouses, Manufactories, &c.	Number of Houses.	Good.	Bad.	Total.	Number of Houses suffering from Nuisances.				In good order.	In bad order.
			Thrice a-week.	Twice a-week.			Good.	Bad.												
Clifton	91	..	3 pumps 1 well	227 hard 542 soft	2220	2	955	828	17	845	180	6	1	..	110	81 houses have no supply of water. The whole of Clifton not scavenged at all. 17 houses have no supply of water. 22 houses have no supply of water.		
St. Augustine's	35	16	..	..	288 hard 455 soft 35 hard	98	26	754	716	11	727	79	5	1	..	113	
Westbury-on-Trym.	5	1	9	..	112 soft	89	..	203	200	..	200	119	1	..	..	17	
Total	40	1	116	4	1659	23407	28	1912	1744	28	1772	378	12	2	..	240			

APPENDIX L.

POLICE RETURN 3 A.—ABSTRACT of the NUMBER and CONDITION of the COURTS in the CITY and COUNTY of BRISTOL.

PARISH.	Thoroughfares.	Not Thoroughfares.	Total.	Surfaces.			Scavenging.			Drainage.			Water.			Public Conduits.	Number of Houses suffering from Nuisances.	Total Number of Houses.	Total Number of Privies.	Instances of Over-crowding.	REMARKS.		
				Paved and Flagged.	Paved and Pitched.	Pitched.	Neither Paved nor Pitched.	Imperfect, three times a-week.	Imperfect, twice a-week.	Ashes only removed.	Totally neglected.	Covered.	Open.	Pumps and Wells.	Bad.							Good.	Water Company, No. of Courts supplied.
Clifton	56	56	21	2	16	4	15	56	3	7	..	36 hard 34 soft	4	74	321	223	..	76 houses have no supply of water. 154 houses having no back windows. 11 houses have no supply of water. 83 houses have no back windows. 5 courts have no drainage.	
St. Augustin's	3	26	29	6	..	22	..	1	..	..	..	3	25	4	..	21 hard 24 soft 8 hard	3	15	182	135	..
Total	3	26	29	6	..	22	..	1	..	..	..	3	25	4	..	36 hard 34 soft 21 hard 24 soft 8 hard	9	97	57	45	..

APPENDIX O.

BURIAL GROUND OF THE MORAVIAN BRETHREN.

The Memorial of the Committee and Congregation of the Unitas Fratrum or United Brethren, commonly called Moravians, in the City of Bristol,

RESPECTFULLY SHEWETH,

THAT the United Brethren are an Episcopal Protestant Church, specially acknowledged as such by Act of Parliament passed in the 22nd year of the reign of His Majesty George the Second.

That the said congregation in Bristol was established in the year 1775, and consists of about 240 persons.

That the chapel is in Upper Maudlin-street, with a private burial-ground of about 1,000 square yards, *exclusively* available for members of the church of the brethren.

That the average number of interments for 94 years has been less than five (children included) yearly.

That the burial-ground is surrounded by the chapel, the minister's residence, and other houses and gardens belonging to the congregation.

That the graves are all 9 feet deep, and the gravestones uniformly 18 inches by 15 inches.

That the burial-ground is kept in the neatest possible order, and adorned with ivy, shrubs, and flowers.

That it is the opinion of very competent judges of the medical profession, that no evil atmospheric influences can possibly arise from such a place of interment, under such stringent regulations, and available only for so small a community.

That the United Brethren, in all countries, very highly value the privilege of being buried near their departed relatives and friends.

That while your memorialists would strongly deprecate any attempt to obstruct whatever measures the wisdom of Parliament may direct for the sanitary well-being of the people at large, your memorialists beg respectfully to express their conviction that it cannot be inteded or desired to inflict a serious loss and injury upon a congregation of Christians, where no necessity for interference exists, and no detriment can accrue to the public from allowing the use of the burial-ground to be continued in the same manner and under the same regulations as heretofore.

And your memorialists, therefore, respectfully entreat that you will cause the premises to be viewed, and if found in accordance with the description here given, that the burial-ground of this congregation may be exempted from the operation of the Act, during a term of a hundred eighty, or such other term of years, as may be deemed safe and reasonable.

On behalf of the Congregation of United Brethren in Bristol.

JNO. P. LIBBEY, *Minister.*

J. B. BADHAM,
FRAS. MARYCHURCH, } *Members of the Committee*
SAML. S. BIRTILL,

Bristol, 14 February 1850.

APPENDIX P.

REPORT of a COMMITTEE of the CLERGY of the DEANERY of BRISTOL on the best Means of providing additional Burial Ground for the populous Parishes of the City of Bristol.

16th January, 1849.

AT a Meeting of the Clergy of the Deanery of Bristol, held on Thursday, October 7th, 1847, the Rural Dean directed the attention of the Incumbents of the city and suburban parishes of Bristol to the necessity of making further provision for the interment of the dead; a Committee, consisting of the Rural Dean and other Incumbents, was appointed to consider the subject and report thereon.

The Committee thankfully availed themselves of the services of C. S. Clarke, Esq., who kindly offered to undertake the office of Honorary Secretary.

Reference having been made to the Acts 3rd Geo. IV., c. 72, sec. 26; and 8th and 9th Vict., c. 70, sec. 14, a doubt arose whether those clauses could be so construed as to give power to parishes to unite in the purchase of land for the purpose of additional burial-ground, or whether under such Acts it would be necessary that each parish should proceed separately. This question appeared to the Committee of great importance. All the city parishes, with the exception of St. Paul's, require additional burial-ground; and it may be determined that even St. Paul's burial-ground is too much in the midst of the population for the health of the neighbourhood. To purchase land for all these parishes, in separate plots, would involve a large outlay in conveyance, inclosure, consecration fees, &c., which expenses would be considerably diminished by the purchase of land for a common cemetery, if such an arrangement could be legally effected without the violation of the parochial system. The Committee opened a correspondence on this subject with the Secretary of the Church Building Commissioners, and also with the Rev. Charles Page Eden, Fellow of Oriel College, Oxford, who has recently taken an active part in promoting a similar scheme for the benefit of the parishes of the city of Oxford. From these gentlemen the Committee obtained the most kind assistance in their inquiries, together with reference to valuable documents, plans, and suggestions. The Committee, thus informed, are now enabled to report:—

1st. That Her Majesty's Church Building Commissioners fully approve of the principle of purchasing land for additional parochial burial-grounds.

2ndly. That the Acts before referred to, with the addition of a more recent enactment, 9th and 10th Vict., cap. 68, are sufficient to empower parishes to unite in purchasing land for the purpose of parochial cemeteries.

3rdly. That the land, thus purchased, may be apportioned to the several parishes uniting in the purchase, and "after consecration each portion shall be, and be deemed, part of the parish for which such portion was purchased."

4thly. That the same facilities are offered for carrying out, at Bristol, a scheme for providing additional burial-grounds for the several parishes, as have enabled the cities of Oxford and Cambridge to accomplish a similar object.

In order that they might be able to propose some practicable plan for carrying into effect the object contemplated by the Acts above referred to, the Committee have applied themselves to ascertain, with as much accuracy as was possible, the probable wants of the population, and the probable expense of providing for those wants. The following is the result of their inquiries:—

Taking the present population of Bristol and its suburbs at 140,000,* the quantity of land required for the burial of the dead, according to the quantity provided in the case of the Cambridge cemetery, would be somewhat more than 60 acres; but considering the proportion of deaths to the population to be 3·1 per cent., the quantity,† according to the data in Mr. Chadwick's Sanitary Report, would be about 48 acres. The probable cost of the land in the neighbourhood of the city would not be less than 7,500*l.*, to which must be added, for the expense of conveyance, enclosure, lodges, chapel, &c., a further sum of about 2,500*l.*; making the entire probable expense about 10,000*l.* It would be, obviously, important that the cemeteries should be situated in localities at a convenient distance from the parishes for which such additional burial-ground

* The application of the Census of 1841 to ecclesiastical purposes is rendered exceedingly difficult and unsatisfactory, by the circumstance of its having been taken without reference to the parochial boundaries in the city of Bristol. It is hoped, however, that the estimates in this Report will be found sufficiently accurate for their purpose. The population of Bristol, included in the parishes referred to in this Report, is thus estimated:—

1. District of Castle Precincts, including the parishes of All Saints, Christchurch and St. Ewen, St. John the Baptist, St. Mary-le-Port, St. Nicholas and St. Leonard, St. Peter, St. Stephen, and St. Werburgh	10,726
2. District of St. Augustine, including St. Augustine, St. George, Brandon-hill, and St. Michael	13,509
3. District of St. Mary Redcliffe, including St. Mary Redcliffe, St. Thomas, and Temple	14,617
4. District of St. James (in)	10,555
5. District of St. Paul, and St. Philip and St. Jacob (in)	14,872
6. District of Clifton, including Christchurch, Clifton, and St. John the Evangelist	14,177
7. District of St. Philip and St. Jacob (out)	21,590
8. District of St. James and St. Paul (out)	6,339
9. District of Bedminster	20,000

Total Population of the Nine Districts, in 1841	126,385
Increase since 1841, estimated at 1·5 per cent. per annum, for 8 years	15,166

Present estimated Population of the Parishes referred to	141,551
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† The quantity of land required is thus estimated from the data in Mr. Chadwick's Report above referred to:—

In Whitechapel, the deaths are 1,125 for every 35,000 = 3·35 per cent.
For every 20,000 of such a population the land required = 7·4 acres.

In Bristol, including Clifton and the out-parishes, enumerated together with Bedminster, the deaths, as far as they can be estimated from the best information to be obtained, do not exceed 3·1 per cent.

∴ the land required for interment in Bristol for every 20,000 of the population would be 3·35 : 3·1 :: 7·4 : 6·85 acres.

and the quantity for the whole population of Bristol, estimated at 140,000, would be $7 \times 6·85 = 47·95$, or about 48 acres.

be provided. The Committee, therefore, after due consideration, I recommend that there should be four such cemeteries, and that following Unions of parishes should be formed for the purchase of in such situations as may be deemed most convenient.

CENTRAL UNION for CEMETERY, on the NORTH of the CITY, towards HORFIELD or REDLAND.

Name of Parish.	Population.	Quantity of Land.			Probable Cost.		
		A.	R.	P.	£.	s.	d.
aints	174	0	0	20	25	0	0
Andrew's	3,800	1	0	0	200	0	0
Augustine's	4,900	2	0	0	400	0	0
Ar nabas	2,700	0	3	0	150	0	0
Church and St. Ewen's .	1,147	0	2	0	100	0	0
George's, Brandon-hill .	5,400	2	0	0	400	0	0
James'	12,300	3	0	0	600	0	0
John the Baptist's . . .	938	0	2	0	100	0	0
Mary-le-Port	277	0	0	20	25	0	0
Michael's	4,254	1	2	0	300	0	0
Nicholas and St. Leonard's	2,447	1	0	0	200	0	0
Paul's	8,200	2	0	0	400	0	0
Peter's	1,150	0	2	0	100	0	0
Stephen's	2,269	1	0	0	200	0	0
Terburgh's	99	0	0	20	25	0	0
Total	50,055	16	0	20	3,225	0	0

CLIFTON UNION for CEMETERY, on the NORTH-WEST of the CITY, towards WESTBURY-ON-TRYM.

Name of Parish.	Population.	Quantity of Land.			Probable Cost.		
		A.	R.	P.	£.	s.	d.
St. Andrew's	9,735	3	0	0	750	0	0
Church	4,142	2	0	0	500	0	0
John the Evangelist's . .	2,800	1	0	0	250	0	0
Total	16,677	6	0	0	1,500	0	0

ST. PHILIP'S UNION for CEMETERY, on the NORTH-EAST of the CITY, towards STAPLETON or FISHPONDS.

Name of Parish.	Population.	Quantity of Land.			Probable Cost.		
		A.	R.	P.	£.	s.	d.
Philip and Jacob	16,300	4	2	0	900	0	0
Trinity	6,883	2	2	0	500	0	0
aviour's	2,307	1	0	0	200	0	0
nde's	5,000	2	0	0	400	0	0
Weir	3,850	2	0	0	400	0	0
Total	34,340	12	0	0	2,400	0	0

(D.)--BEDMINSTER UNION for CEMETERY, on the SOUTH side of the CITY, to BRISLINGTON or DUNDRY.

Name of Parish.	Population.	Quantity of Land.			Probable Cost	
		A.	R.	P.	£.	s.
Bedminster	17,862	5	0	0	1,000	0
St. Paul's, Bedminster	5,500	2	0	0	400	0
St. Mary Redcliffe	8,025	3	0	0	600	0
St. Thomas	1,403	1	0	0	200	0
Temple	7,689	3	0	0	600	0
Total	40,479	14	0	0	2,800	0

The Committee would direct the attention of the clergy to the 82d and 83rd sections of the Health of Towns' Act (11th and 12th Vic. cap. 63), which seem to render still more urgent the necessity of making further provision for the interment of the dead. By the 82d clause it is enacted:—

“ That if upon the representation of the Local Board of Health, after inquiry and report by a Superintending Inspector, notified to the Lord Bishop of the diocese, and made, notified, and published in manner hereinbefore directed, with respect to the inquiry and report of Superintending Inspectors previously to the constitution of a district under this Act, and after inquiry by such other ways and means as the General Board of Health may think fit to direct, the said General Board shall certify that any burial-ground, situate within any district to which this Act is applied, is in such a state as to be dangerous to the health of persons living in the neighbourhood thereof, or that any church, or other place of public worship, within any such district, is dangerous to the health of persons frequenting the same, by reason of the sordid and filthy state of the vaults or graves within the walls of, or underneath the same, and that sufficient means of interment exist within a convenient distance from such burial-ground, church, or place of public worship, it shall not be lawful, after a time to be named in such certificate, to allow, or permit, or suffer to be buried, any further corpses or coffins within, or under the ground, church, or place of worship to which such certificate relates, except in so far as may be allowed by such certificate, and whosoever after notice of such certificate buries, or causes, permits, or suffers to be buried, any corpse or coffin, contrary to this enactment, shall, for every such offence, be liable to a penalty of twenty pounds.

“ And be it enacted, that no vault or grave shall be constructed or made within the walls of, or underneath, any church, or other place of public worship, built in any district after the passing of this Act, and no burial-ground shall be made or formed within any district after the passing of this Act, without the consent of the General Board of Health first had and obtained, unless the same be made or formed upon land purchased or authorized by Parliament, to be appropriated for the purpose of being used as a burial-ground before the passing of this Act, and whosoever shall bury, or cause, permit, or suffer to be buried, any corpse or coffin in any vault, grave, or burial-ground constructed, made, or formed contrary to this enactment, shall, for every such offence,

able to a penalty not exceeding fifty pounds, which may be recovered by any person, with full costs of suit, in any action of debt."

GEO. N. BARROW, *Rural Dean.*

Bristol, January 16, 1849.

At a Meeting of the Incumbents of the Parishes within the City of Bristol, held at the Diocesan Registry Office, on Monday, October 1st, 1849,

The Rev. GEO. N. BARROW, Rural Dean, in the Chair,

It was resolved,

That the foregoing Report, together with the Appendix, be adopted. That the same be submitted to the Lord Bishop for his sanction, and to the General Board of Health for their approval.

That, if sanctioned by the Lord Bishop, and approved by the Board of Health, the same be printed and forwarded to the churchwardens and vestries of the several parishes for consideration, with a view to the immediate accomplishment of the object contemplated.

That the incumbents present be requested to subscribe their names to these resolutions, and that they be sent for signature to those incumbents who have been prevented attending this meeting.

Geo. N. Barrow, Rural Dean, Rector of St. John the Baptist's, and Vicar of St. Nicholas' with St. Leonard's.

W. Knight, Rector of St. Michael's.

H. L. Brice, Rector of St. Peter's.

Chas. Buck, Rector of St. Stephen's.

I. J. Coles, Incumbent of St. Barnabas.

J. H. Woodward, Incumbent of St. James's Parish.

Charles Evanson, Perpetual Curate of St. Andrew's, Montpellier.

H. G. Eland, Incumbent of St. Paul's, Bedminster.

James Marshall, Incumbent of Christ Church, Clifton.

W. Battersby, Incumbent of St. Jude's.

H. C. Rowley, Incumbent of Weir District.

John Strickland, Rector of Christ Church with St. Ewen.

R. Llewellyn Caley, Vicar of All Saints.

R. B. Paul, Vicar of St. Augustine's.

J. Hall, Rector of St. Werburgh's.

J. Packer, Rector of St. Mary-le-port.

A. Rogers, Incumbent of Holy Trinity.

J. Hensman, Incumbent of Clifton.

Ralph L. Hopper, Vicar of St. George's, Brandon Hill.

Thomas Lathbury, Incumbent of St. Simon's.

Samuel E. Day, Vicar of St. Philip and Jacob.

H. G. Walsh, Incumbent of St. John the Evangelist's, Bristol.

F. Elwin, Vicar of Temple.

I have perused the above Report, and entirely approve its contents.

J. H. GLOUCESTER AND BRISTOL.

Stapleton, November 26, 1849.

APPENDIX Q.

Extract from Mr. Savery's Report, &c.

THE BRISTOL GENERAL CEMETERY, ARNO'S VALE, within one mile of the City of Bristol, established by Act of Parliament 1st Victoria.

I will now, in accordance with your request, give you some particulars as to the Arno's Vale Cemetery.

In the year 1836-7, some gentlemen, anxious to promote so desirable a public improvement, applied to Parliament for an Act to establish a general cemetery for the interment of the dead in or near the city of Bristol; and the Act, of which I send a print with this Report, was accordingly obtained on the 15th of July 1837. Under its provisions, land for a cemetery, was purchased at Arno's Vale, about three-quarters of a mile from the bridge on the Bath road, near the railway terminus; and a chapel was built for performance of funeral services according to the rites of the Established Church, and another for the use of Dissenters; a chaplain is appointed for each.

On visiting this cemetery, I believe you will find that it combines all the advantages which ought to be sought for in such an establishment viz.,—

1st. That the site of the cemetery is sufficiently remote from the city to obviate any repetition of the present injury to a resident population, and, yet, not too distant for the general use of the inhabitants.

2nd. That the extent of the land is fully adequate for the proper interment of all the dead from the city.

The ground at Arno's Vale comprises about 27 acres, 7 roods, 1 perch, viz.,—

	A.	R.	P.
Consecrated	8	1	7
Not Consecrated	5	1	10
And remaining, not yet appropriated for Interments .	13	3	2
Total	27	1	19

There are no houses within a considerable distance of the cemetery, and as population and building are not extending in this direction, it is probable that, at all times, and under all circumstances, it will be surrounded, exterior to its fences, by a considerable belt of land, totally devoid of resident population.

The absence of such a provision as this, would, as Mr. Simon justly observes, very soon lead to the extramural cemetery becoming intramuralized by the growth of a new suburb around it; and thus again evince, by a new and unnecessary illustration, how incompatible with each other are the dead and the living as tenants of one locality.

It has always been one of the objects of the promoters of public cemeteries to reduce the expenses of interments, and with this view, the Table of Charges and Fees, which is annexed to this Report, has been fixed by the directors; but the revenue derived has not yet been remunerative; and the only result to the parties engaged in this great public improvement has been that they have thus led the way in a great sanitary improvement for the city.

This will forcibly appear when I state to you that, during the preva-

lence of cholera in Bristol, last summer, and autumn, several hundred corpses, for the interment of which there could have been no suitable ground found in the city, were removed to a portion of the cemetery set apart for that purpose; and that the corporation of the poor have since made arrangements for the burial of the poor who die at the hospital, and who are, accordingly, now interred at Arno's Vale.

The relief to the city, as to this class of interments, will be apparent when I state to you that at Temple churchyard, in 1836, there were buried, from St. Peter's Hospital, 41 bodies; in St. Mary Redcliffe, 21; in St. Peter's, 17; in St. Philip's, 65; and in St. James's, 67; besides several burials, of less numbers, at many other churchyards.

I now wish to direct your attention to the superior arrangements made at a public cemetery with regard to the record of graves and registers of burials. At the churches, the registers of burials are of course kept properly; but I think you will find an extremely imperfect system adopted at private burying-grounds.

At the cemetery, the most perfect register is kept both of burials and graves, with a plan of the ground divided in a book of squares, in which is successively recorded the exact position of all the graves and vaults sold by the Company in which any interment takes place, with references, by numbers, to a list of the names of the persons interred in such graves and vaults, and of every subsequent interment; so that, at any period, however remote, the exact spot in the cemetery where every person has been interred can be clearly ascertained. The books generally kept by the Company are voluminous, and I should be glad if you could inspect them, and the plans, &c., kept at the office.

I am not aware whether it is within your province to consider any suggestions as to the arrangements of a Public General Act to regulate interments; but I take the liberty to state that any measure will be defective which does not provide for the removal of bodies, in certain cases, free of expense, or at a low charge.

Many frightful instances of the production, or fatal aggravation of disease, by the retention of the dead in houses and lodgings occupied by the lower classes, are recorded in Mr. Chadwick's valuable Report on the practice of interments in Towns, in 1843, pages 31 to 41, and I believe that Bristol is by no means free from this class of evil.

Whether the expense incident to carrying into effect some improved system in this respect should be borne by the community generally out of the poor-rates, or whether the property and management of a general cemetery for a city may not judiciously be vested in the Town Council, with power to appropriate part of the revenue towards the expense of the funerals of the labouring classes, are points which I think deserve consideration. You are, probably, aware that in most continental towns, immediately after notice of the death to the proper officer, the corpse is removed from the residences or lodgings of the lower classes to a room, properly locked and guarded, at the public cemetery, outside the town; and there the arrangements are made for the funeral, and at the appointed time, the family and friends go to the cemetery, receive the body, and attend it to the grave.

I have found that the difficulty of having the body of a poor person conveyed to the cemetery has frequently prevented a family from burying there. The bearers, at this class of funeral, are usually acquaintances of

the deceased, who will carry the corpse to a neighbouring churchyard but cannot do so if buried out of the city; and the expense of paying bearers is beyond the means of this class of persons, and especially when, if buried in the consecrated part of the cemetery, they have to pay a mortuary fee of 10s. to the clergyman of the parish from which the body is removed. This unusually large mortuary fee was imposed by the House of Lords when the Bristol Cemetery Act was before them; and though it is not, of course, felt by the gentry and tradesmen of the city, it certainly has influenced many of the artists and labouring classes in still burying their dead within the city.

I should mention, however, that during the prevalence of the cholera all the clergymen gave up this mortuary fee upon interments from St. Peter's Hospital, at the expense of the city; and, in several parishes, this fee is still relinquished upon funerals from St. Peter's Hospital.

I have thus endeavoured to comply with your request to give you a Report on the interment question as affecting Bristol, and I shall be ready to add any personal explanation, if you desire it.

I remain, Sir,

Your obedient servant,

CHARLES SAVERY, Registrar

CHARGES AND FEES.

* * * On future Interments, after purchase of a vault or grave, the Fees only are payable.

Interment Fees.

	Interment Fees.			
	£.	s.	d.	£. s. d.
An interment in catacombs under chapel	7	0	0	4
In the cemetery, a brick grave, in perpetuity (masonry included)	7	0	0	2
And a private grave, not bricked, but also in perpetuity	2	0	0	None
				Inter- after 1l. 1s.

A common interment, 10s.

Removal from other places of interment to	Per Coffin.		
	£.	s.	d.
Private grave	1	1	0
Vault in open ground	2	2	0
In catacombs	3	3	0

In addition to the price of the purchase of the same.

Extra Fees.

On all interments before 2 o'clock, P.M., or after sunset	0	5	0
On all interments in the consecrated part of the cemetery, the fee to the minister of the parish from which the body is removed, required by the Act of Parliament	0	10	0

	£.	s.	d.
Desk service, or use of church or chapel, if required, on common interments (all other interments are entitled to the service without fees)	0	5	0
Use of screen for shelter in bad weather	0	10	0
For opening and re-closing vault or brick grave	1	1	0
For removing and replacing flat stone in ground	0	5	0
Ditto head and foot stones	0	3	0
For extra space beyond the size of vault or grave, per square foot	0	6	0
Maintaining graves, per annum	0	2	6
Ditto, in perpetuity	4	4	0
Maintaining grave-stones, per annum	0	3	6
Ditto, in perpetuity	5	5	0
Entry of grant of private vaults, graves, &c.	0	2	6

N.B. The charge for privilege of placing a monumental table in the pels or cloisters, or walls of the cemetery, to be the subject of special eement.

REGULATIONS.

All orders must be given, and the dues paid at the office, No. 12, n-street, Bristol, before the ground can be opened or the vault built. Notice of interment to be given at the office before 12 o'clock of the preceding the proposed interment, except in cases of interments on nday, of which notice is to be given before 12 o'clock on the pre- ng Sunday; and if a vault or brick grave is to be constructed, three r day's notice must be given.

ny clergyman or dissenting minister preferred by the friends of the eased may perform the ceremony; but, otherwise, the chaplain, or a ister provided by the Company, will do so, free of charge.

o interments in any catacomb, except in coffins of lead.

o brick or stone banks, nor grave stone or monument, to be made reected, except over vaults or graves wherein the exclusive right of al is purchased.

vaults and brick graves, in the open ground, to be opened from the only, unless by special permission.

onuments or grave stones to be erected within six months after hase of exclusive right of interment in any vault, brick grave, or e in the open ground, or the same not to be considered private, ss permission for further time be obtained from the Company.

rawing of every monument is to be submitted for approval, and in the office, prior to erection.

ll monuments, grave stones, vaults, and places of burial, whether e by the Company or by the purchaser, to be kept in repair by the ers, or the same not to be considered as private; but this will be ertaken by the Company, either at an annual charge, or in perpetuity, greed upon.

he cemetery is open for public inspection, free of charge, from eight ck in the morning till sunset; but on Sundays it is elosed, except to rals, and to parties presenting tickets from the office, where, or at cemetery, all information may be obtained.

The chapels and catacombs cannot be seen; nor a carriage allow enter the cemetery, without an order from the office.

Monuments and grave stones erected by the Company, if require Applications for information respecting interments may be had office in Bristol, or at the cemetery.

Certificates of burial can only be obtained at the office, No. 12, street.

Office hours from ten till five, Sundays excepted.

It is requested that no fee may be given to any attendant or servant the cemetery, and that all complaints of incivility or inattention be made to the registrar.

CHARLES SAVERY,
Clerk to the Company and Registrar

Bristol, August, 1843.